PB-248 829

# SOURCE INVENTORY AND EMISSION FACTOR ANALYSIS. VOLUME II. APPENDICES

Larry L. Gibbs, et al

PEDCo-Environmental Specialists, Incorporated

Prepared for:

Environmental Protection Agency

September 1974

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PB 248 829

EPA-450/3-75-082-b

September 1974

# SOURCE INVENTORY AND EMISSION FACTOR ANALYSIS, VOLUME II - APPENDICES

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air and Waste Management
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

EPA-450/3-75-082-b

# SOURCE INVENTORY AND EMISSION FACTOR ANALYSIS, VOLUME II - APPENDICES

by

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Contract No. 68-02-1350

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Prepared for

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Publication No. EPA-450/3-75-082-b

## ACKNOWLEDGMENT

This report was prepared for the U.S. Environmnetal Protection Agency by PEDCo-Environmental Specialists, Inc., Cincinnati, Ohio. Mr. Donald J. Henz was the PEDCo Project Manager. Principal authors of the report were Mr. Larry L. Gibbs, Mr. Charles E. Zimmer, and Mr. John M. Zoller. The computer program was developed by Research Triangle Institute under the direction of Mr. Richard Haws.

Mr. Thomas F. Lahre and Mr. George Duggan were the Project Officers for the Environmental Protection Agency. The authors appreciate the assistance and cooperation extended to them by Mr. Lahre, Mr. Duggan, and other members of the U.S. Environmental Protection Agency.

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**TECHNICAL REPORT DATA**
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| | |
|---|---|
| 1. REPORT NO. EPA-450/3-75-082-b | 2. |
| 3. RECIPIENT'S ACCESSION NO. | |
| 4. TITLE AND SUBTITLE<br>Source Inventory and Emission Factor Analysis<br>Volume II - Appendices | 5. REPORT DATE<br>September 1974<br>6. PERFORMING ORGANIZATION CODE |
| 7. AUTHOR(S) | 8. PERFORMING ORGANIZATION REPORT NO. |
| 9. PERFORMING ORGANIZATION NAME AND ADDRESS<br>PEDCo-Environmental Specialists, Inc.<br>Suite 13, Atkinson Square<br>Cincinnati, Ohio 45246 | 10. PROGRAM ELEMENT NO.<br>11. CONTRACT/GRANT NO.<br>68-02-1350 |
| 12. SPONSORING AGENCY NAME AND ADDRESS<br>U.S. Environmental Protection Agency<br>Office of Air Quality Planning & Standards<br>Research Triangle Park, North Carolina 27711 | 13. TYPE OF REPORT AND PERIOD COVERED<br>Final Report<br>14. SPONSORING AGENCY CODE |
| 15. SUPPLEMENTARY NOTES | |

16. ABSTRACT

Volume I describes a Source Inventory and Emission Factor Analysis (SIEFA), a program designed to determine the precision of emission inventories. Through application of the SIEFA program, users of the data generated in an emission inventory will have at hand not only the values derived from emission calculations but a definition of their quality; that is, a statement of the statistical precision of each value and the precision of the overall emission inventory. Throughout this report these words have the following meaning:

Precision - A measure of variability, due to unknown factors which affect a measurement made on similar elements from a population. This variability is assumed to be random.

Accuracy - The degree to which data are biased.

The precision values generated herein are not actually "true" precision, but rather the best estimate of precision that could be obtained.

Volume II contains the Appendices to Volume I.

17. KEY WORDS AND DOCUMENT ANALYSIS

| a. DESCRIPTORS | b. IDENTIFIERS/OPEN ENDED TERMS | c. COSATI Field/Group |
|---|---|---|
| Source Inventory NEDS<br>Emission Factor<br>Precision<br>Accuracy<br>Area Source<br>Point Source | PRICES SUBJECT TO CHANGE | |

| | | |
|---|---|---|
| 18. DISTRIBUTION STATEMENT<br>Release Unlimited | 19. SECURITY CLASS (This Report)<br>Unclassified<br>20. SECURITY CLASS (This page)<br>Unclassified | 21. NO. OF PAGES<br>400<br>22. PRICE<br>10.75-2.25 |

EPA Form 2220-1 (9-73)

# APPENDIX A

# PRECISION OF RESIDENTIAL FUEL USE DATA

## APPENDIX A

Calculation of standard error for the number of dwelling units heating with different fuels in average counties of Ohio, Michigan, Iowa, and Kentucky.

Tables A-1 and A-2 present the data used for the determination of precisions for various fuels. The values of the standard error were obtained from Table B in Reference 9.

Table A-1 SUMMARY OF DATA USED IN CALCULATING PRECISIONS OF NUMBER OF DWELLING UNITS UTILIZING DIFFERENT FUELS

| State | No. of Counties | No. of Dwelling Units | No. of D.U. Coal | No. of D.U. Oil | No. of D.U. N.G. | No. of D.U. Wood | No. of D.U. LPG |
|---|---|---|---|---|---|---|---|
| Ohio | 88 | 3,389,432 | 101,229 | 462,939 | 2,517,093 | 4,628 | 72,436 |
| Michigan | 84 | 2,653,059 | 59,002 | 583,842 | 1,856,238 | 5,441 | 69,503 |
| Kentucky | 120 | 983,665 | 134,972 | 88,503 | 570,324 | 25,097 | 77,719 |
| Iowa | 99 | 896,311 | 13,055 | 186,079 | 563,016 | 1,405 | 112,302 |



Table A-2 PRECISIONS FOR DIFFERENT FUELS

| Fuel | Avg. No. D.U./County | Avg. No. Using Fuel per County | $\sigma$ (D.U.) | $\sigma \div$ Avg. Precision |
|---|---|---|---|---|
| Coal | 20,000 | 790 | 108 | 0.14 |
| Oil | 20,000 | 3,380 | 206 | 0.06 |
| N.G. & L.P.G. | 20,000 | 14,933 | 300 | 0.02 |
| Wood | 20,000 | 94 | 39 | 0.42 |

# APPENDIX B

## PRECISION FOR DETERMINATION OF HEATING REQUIREMENT FACTORS FOR DIFFERENT FUELS

## APPENDIX B

The ASHRAE Handbook of Fundamentals[21] gives examples showing heat loss from a house having seven rooms and good insulation for a temperature differential of 70 degrees. Heat loss values are also given for the same house under the same conditions, but with no insulation. The amount of fuel required to heat a dwelling unit for one degree-day is calculated by the following equation:

$$H = \frac{\text{heat loss}}{\text{hr-D.U.}} \times \frac{5 \text{ rooms}}{7 \text{ rooms}} \times \frac{24 \text{ hrs}}{1 \text{ day}} \times \frac{1}{70^{\circ}} \times \frac{\text{amount of fuel}}{\text{heat content}} \times \frac{1}{\text{eff. of heating unit}}$$

where H = heating requirement factor

D.U. = dwelling unit

Table B-1 lists the factors used and the values obtained for heating requirement factor for different fuels.

Table B-1 SUMMARY OF DATA USED IN CALCULATING THE HEATING REQUIREMENT FACTORS FOR DIFFERENT FUELS

| Fuel | House | Heat Loss (BTU/hr) | Heat Content of Fuel | Efficiency of Heating Unit | Heating Requirement Factor |
|---|---|---|---|---|---|
| Coal | Insulated | 75,230 | $24 \times 10^6$ BTU/ton | 70% | 0.001097 $\frac{\text{ton}}{\text{D.U.-D.D.}}$ |
| Coal | Non-insulated | 113,950 | $24 \times 10^6$ BTU/ton | 70% | 0.00161 $\frac{\text{ton}}{\text{D.U.-D.D.}}$ |
| Fuel Oil | Insulated | 75,230 | $140 \times 10^6$ BTU/1000 gal. | 80% | .16847 $\frac{\text{gal.}}{\text{D.U.-D.D.}}$ |
| Fuel Oil | Non-insulated | 113,950 | $140 \times 10^6$ BTU/1000 gal. | 80% | .26578 $\frac{\text{gal.}}{\text{D.U.-D.D.}}$ |
| Wood | Insulated | 75,230 | $13 \times 10^6$ BTU/ton | 75% | .00189 $\frac{\text{ton}}{\text{D.U.-D.D.}}$ |
| Wood | Non-insulated | 113,950 | $13 \times 10^6$ BTU/ton | 75% | .00286 $\frac{\text{ton}}{\text{D.U.-D.D.}}$ |

## APPENDIX C

To calculate precisions of emissions inventories for different counties in different states, it is necessary to assume a value for point source consumption of bituminous coal by industry. As a basis for the following calculations assume that point sources account for 67 percent of the total industrial usage of bituminous coal. The following tables are calculations of precision values for random counties in Ohio, Kansas, and Kentucky. Figure C-1 is a plot of the calculated values of $\frac{\sigma(A_{B.C._i})}{A_{B.C.}}$ Versus $A_{B.C}$. Equations are derived to describe the curve.

Table C-1 PRECISIONS OF THE AREA SOURCE CONSUMPTION OF BITUMINOUS COAL BY INDUSTRIAL SOURCES FOR VARIOUS COUNTIES IN OHIO

Ohio

$I_{B.C.} = 15,206,000$

$P_{B.C.} = 10,137,000$

$(I_{B.C.} - P_{B.C.}) = 5,069,000 = A_{B.C._s}$

$E_s = 1,397 \times 10^3$

I = State Consumption (indus.)

P = Point Consumption (indus.)

E = Mfg. employees

| | $E_c$ $(10^3)$ | $A_{B.C.}$ | Var $(A_{B.C.})$ | Std Dev $\sqrt{\text{Var}\ (A_{BC})}$ $\sigma\ (A_{B.C.})$ | Precision $\frac{\sigma\ (A_{B.C.})}{A_{B.C.}}$ |
|---|---|---|---|---|---|
| 1. | 277.3 | 1,006,000 | ± 53,879 | 232.1 | $2.307 \times 10^{-4}$ |
| 2. | 151.9 | 551,168 | ± 39,204 | 198.0 | $3.592 \times 10^{-4}$ |
| 3. | 92.5 | 335,635 | ± 35,235 | 187.7 | $5.592 \times 10^{-4}$ |
| 4. | 64.1 | 226,418 | ± 31,962 | 178.8 | $7.896 \times 10^{-4}$ |
| 5. | 23.6 | 85,632 | ± 33,063 | 181.8 | $2.123 \times 10^{-3}$ |
| 6. | 1.2 | 4,354 | ± 32,809 | 181.1 | $4.166 \times 10^{-2}$ |
| 7. | .3 | 1,089 | 32,916 | 181.4 | $1.666 \times 10^{-1}$ |

$$= A_{BC}^2 \left[\left(\frac{\text{Var } I + \text{Var } P}{[I - P]^2}\right) + \left(\frac{\text{VarE}}{E_c^2}c + \frac{\text{VarE}}{E_s^2}s\right)\right] \text{ where Var} = \sigma^2_{\text{value}}$$

$$= 1089^2 \left[\frac{500^2 + 500^2}{5,069,000^2} + \left(\frac{50^2}{300^2} + \frac{50^2}{1,397,000^2}\right)\right]$$

$$= 32,916$$

Table C-2 PRECISIONS OF THE AREA SOURCE CONCENTRATION OF BITUMINOUS COAL BY INDUSTRIAL SOURCES FOR VARIOUS [illegible]TS IN KANSAS

Kansas

$I_{B.C.}$ = 169,000 tons/yr

$P_{B.C.}$ = 112,667 tons/yr

$I_{B.C.} - P_{B.C.}$ = 56,333 tons/yr

$E_s = 143.8 \times 10^3$

| | $E_c$ $(10^3)$ | $A_{B.C.}$ | Var $(A_{B.C.})$ | $\sigma(A_{B.C.})$ | $\frac{\sigma(A_{B.C.})}{A_{B.C.}}$ |
|---|---|---|---|---|---|
| 1. | 56.1 | 21976.9 | ±76,488 | 276.6 | $1.258 \times 10^{-2}$ |
| 2. | 22.6 | 8853.5 | ±12,736 | 112.9 | $1.275 \times 10^{-2}$ |
| 3. | 9.1 | 3564.9 | ± 2,386 | 48.85 | $1.370 \times 10^{-2}$ |
| 4. | 4.3 | 1684.5 | ± 830.8 | 28.82 | $1.711 \times 10^{-2}$ |
| 5. | 1.9 | 744.3 | ± 470.9 | 21.70 | $2.916 \times 10^{-2}$ |
| 6. | .5 | 195.9 | ± 389.7 | 19.74 | $1.007 \times 10^{-1}$ |
| 7. | .1 | 39.2 | ± 384.2 | 19.60 | $5.001 \times 10^{-1}$ |

Table C-3 PRECISIONS OF THE AREA SOURCE CONSUMPTION OF BITUMINOUS COAL BY INDUSTRIAL SOURCES FOR VARIOUS COUNTIES IN KENTUCKY

Kentucky

$I_{B.C.} = 2,292,000$

$P_{B.C.} = 1,528,000$

$(I - P) = 764,000$

$E_s = 224.6 \times 10^3$

| | $E_c$ $(10^3)$ | $A_{B.C.}$ | Var $(A_{B.C.})$ | $\sigma$ $(A_{B.C.})$ | $\frac{\sigma (A_{B.C.})}{A_{B.C.}}$ |
|---|---|---|---|---|---|
| 1. | 89.8 | 305,464 | $\pm$113,463 | 336.8 | $1.102 \times 10^{-3}$ |
| 2. | 16.0 | 54,426 | $\pm$ 31,609 | 177.8 | $3.266 \times 10^{-3}$ |
| 3. | 10.1 | 34,356 | $\pm$ 29,988 | 173.1 | $5.040 \times 10^{-3}$ |
| 4. | 8.4 | 28,573 | $\pm$ 29,665 | 172.2 | $6.028 \times 10^{-3}$ |
| 5. | 5.1 | 17,348 | $\pm$ 29,194 | 170.9 | $9.849 \times 10^{-3}$ |
| 6. | 3.3 | 11,225 | $\pm$ 29,039 | 170.4 | $1.518 \times 10^{-2}$ |
| 7. | 0.4 | 1,361 | $\pm$ 28,939 | 170.1 | $1.250 \times 10^{-1}$ |

Table C-4 SUMMARY OF PRECISIONS CALCULATED FOR THE AREA SOURCE CONSUMPTION OF BITUMINOUS COAL BY INDUSTRIAL SOURCES IN RANDOM COUNTIES

| $A_{B.C.}$ | $\frac{\sigma(A_{B.C.})}{A_{B.C.}}$ |
|---|---|
| 1,006,000 | $2.307 \times 10^{-4}$ |
| 551,168 | $3.592 \times 10^{-4}$ |
| 335,635 | $5.592 \times 10^{-4}$ |
| 85,632 | $2.123 \times 10^{-3}$ |
| 4,354 | $4.166 \times 10^{-2}$ |
| 1,089 | $1.666 \times 10^{-1}$ |
| 21,976.9 | $1.258 \times 10^{-2}$ |
| 8,853.5 | $1.275 \times 10^{-2}$ |
| 3,564.9 | $1.370 \times 10^{-2}$ |
| 1,684.5 | $1.711 \times 10^{-2}$ |
| 744.3 | $2.916 \times 10^{-2}$ |
| 195.9 | $1.007 \times 10^{-1}$ |
| 39.2 | $5.001 \times 10^{-1}$ |
| 305,464 | $1.102 \times 10^{-3}$ |
| 54,426 | $3.266 \times 10^{-3}$ |
| 34,356 | $5.040 \times 10^{-3}$ |
| 28,573 | $6.028 \times 10^{-3}$ |
| 17,348 | $9.849 \times 10^{-3}$ |
| 11,225 | $1.518 \times 10^{-2}$ |
| 1,361 | $1.250 \times 10^{-1}$ |

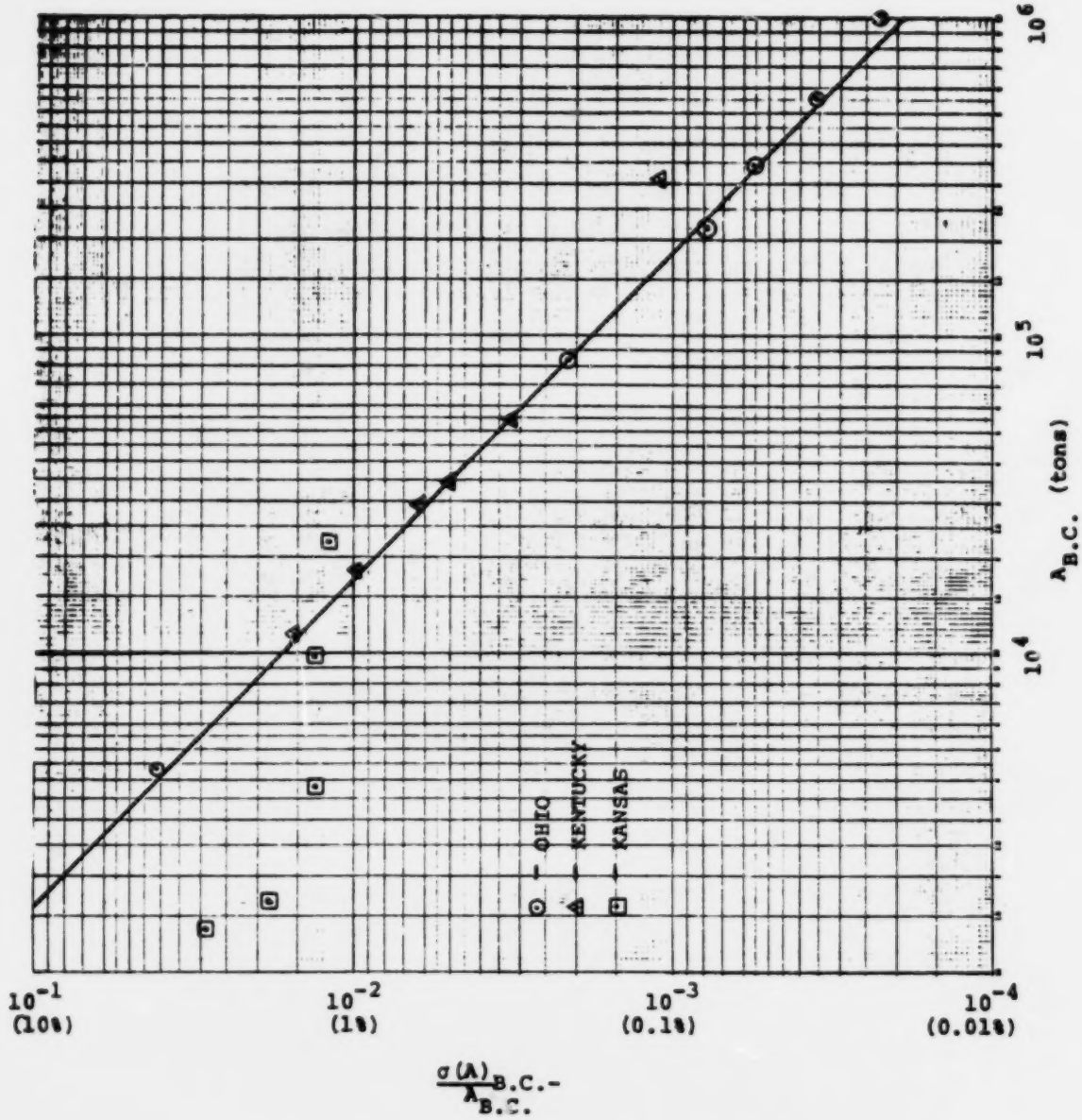


Figure C-1 Precision versus industrial bituminous coal usage.

A straight line on log versus log graphs indicates an equation of the form:

$$\log Y = b \log X + \log a$$

or $$y = a X^b$$

For several points on the plot of $\frac{\sigma\ (A_{B.C.})}{A_{B.C.}}$ versus $A_{B.C.}$:

| X | Y | Log Y | Log X |
|---|---|---|---|
| $1 \times 10^2$ | 1.5 | .176 | 2 |
| $1 \times 10^3$ | $1.6 \times 10^{-1}$ | -.796 | 3 |
| $1 \times 10^4$ | $1.66 \times 10^{-2}$ | -1.780 | 4 |
| $1 \times 10^5$ | $1.78 \times 10^{-3}$ | -2.750 | 5 |

$$.176 = \log a + 2b$$

$$-(-.796 = \log a + 3b)$$

$$.972 = -b \qquad b = -.972$$

---

$$-.796 = \log a + 3b$$

$$-(-1.780 = \log a + 4b)$$

$$.984 = -b \qquad b = 0.984$$

---

$$-1.780 = \log a + 4b$$

$$-(-2.750 = \log a + 5b)$$

$$.970 = -b \qquad b = -.970$$

Use $b = -.970$

$$.176 = \log a + 2b$$

$$\log a = .176 - 2\ (-.970) = 2.116$$

$$a = 1.305 \times 10^2$$

$$-.796 = \log a + 3b$$

$\log a = -.796 - 3\ (-.970) = 2.114$

$a = 1.301 \times 10^2$

$-1.780 = \log a + 4b$

$\log a = -1.780 - 4\ (-.97) = 2.100$

$a = 1.26 \times 10^2$

$-2.750 = \log a + 5b$

$\log a = -2.750 - 5\ (.97) = 2.100$

$a = 1.26 \times 10^2$

therefore: $Y = 1.26 \times 10^2 \times {}^{-.97}$

or $\frac{\sigma(\bar{A})}{\bar{A}} = 1.26 \times 10^2\ (A)^{-.97}$

Table D-1 PRECISION OF SOURCE TEST DATA

RELATIVE TO PARTICULATES[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. Deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Boiler - oil fired (units in lb/$10^3$ gal.) | 22<br>13<br>26<br>27 | 22.0 | 14.0 | 2.06 | 6.80 | 0.309 | 0.155 |
| Boiler - coal fired (Detroit Edison Power) (units in lb/ton) | 0.17A<br>0.27A<br>0.57A<br>0.34A | 0.338A | 0.40A | 2.06 | 0.194A | 0.574 | 0.287 |
| Sludge incinerator (Lower Patomac,Fairfax,Va.) (units in lb/ton) | 3.2<br>1.2<br>4.1 | 2.83 | 2.9 | 1.69 | 1.72 | 0.608 | 0.351 |
| Feed mfg. (inlet) (Kaiser Agricultural Chem.) (units in lb/ton) | 0.05650<br>0.03812<br>0.19966 | 0.098093 | 0.16154 | 1.69 | 0.0956 | 0.976 | 0.563 |
| Primary aluminum smelting (inlet) (Alcoa) (units in lb/ton) | 11.35<br>12.36<br>12.05 | 11.92 | 1.01 | 1.69 | 0.598 | 0.0502 | 0.0230 |
| Pellet cooler (inlet) (Ralston Purina Co.) (units in lb/ton) | 4.99<br>5.51<br>5.80 | 5.433 | 0.81 | 1.69 | 0.479 | 0.0882 | 0.0509 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-1 (continued) PRECISION OF SOURCE TEST DATA RELATIVE TO PARTICULATES[a]

$S = (\text{Max.} - \text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. Deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Rock dryer scrubber (inlet) (IMC Corporation) (units in lb/ton) | 2.307<br>3.343<br>2.574 | 2.741 | 1.036 | 1.69 | 0.613 | 0.224 | 0.129 |
| Rock grinder (inlet) (IMC Corporation) (units in lb/ton) | 2.574<br>1.861<br>2.223 | 2.219 | 0.713 | 1.69 | 0.422 | 0.190 | 0.110 |
| Asphalt concrete (Plant $A_1$) (units in lb/ton) | 0.007<br>0.011<br>0.010 | 0.00933 | 0.004 | 1.69 | 0.00237 | 0.254 | 0.147 |
| Asphalt concrete (Plant B) (units in lb/ton) | 0.007<br>0.012<br>0.005 | 0.00800 | 0.007 | 1.69 | 0.00414 | 0.518 | 0.299 |
| Asphalt concrete (Plant C) (units in lb/ton) | 0.054<br>0.051<br>0.022<br>0.022 | 0.0373 | 0.032 | 2.06 | 0.0155 | 0.416 | 0.208 |
| Catalytic crackers (Plant $A_2$) (units in lb/hr) | 36.7<br>31.8<br>35.6 | 34.70 | 4.9 | 1.69 | 2.90 | 0.0836 | 0.0483 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-1 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO PARTICULATES[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. Deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Catalytic crackers (Plant B) (units in lb/hr) | 54.2<br>56.6<br>64.1 | 58.30 | 9.9 | 1.69 | 5.86 | 0.101 | 0.0583 |
| Lead smelting (blast furnace) (Plant C) (units in lb/ton) | 1.3570<br>0.7750<br>1.2849 | 1.1390 | 0.5820 | 1.69 | 0.344 | 0.302 | 0.174 |
| Lead smelting (reverberatory furnace) (Plant G) (units in lb/ton) | 0.2565<br>0.1763<br>0.2046 | 0.2125 | 0.0802 | 1.69 | 0.0475 | 0.224 | 0.129 |
| Brass and bronze (reverberatory furnace) (Plant B) (units in lb/ton) | 0.60<br>0.41<br>0.43<br>0.42 | 0.465 | 0.19 | 2.06 | 0.0922 | 0.198 | 0.0990 |
| Brass and bronze (rotary furnace) (Plant D) (units in lb/ton) | 0.71<br>2.00<br>1.31 | 1.34 | 1.29 | 1.69 | 0.763 | 0.569 | 0.329 |
| Basic oxygen furnace (Plant $A_1$) (units in lb/ton) | 0.0021<br>0.0015<br>0.0048 | 0.0028 | 0.0033 | 1.69 | 0.00195 | 0.696 | 0.402 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-1 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO PARTICULATES[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. Deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Basic oxygen furnace (Plant C) (units in lb/ton) | 0.730<br>0.370<br>0.0471 | 0.05237 | 0.036 | 1.69 | 0.0213 | 0.407 | 0.235 |
| Sludge incinerator (Plant D) (units in lb/ton) | 2.20<br>3.24<br>2.87 | 2.77 | 1.04 | 1.69 | 0.615 | 0.222 | 0.128 |
| | | | | | | | Average 0.196 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

a) Data from U.S. EPA files unless otherwise noted.

## Table D-2 PRECISION OF SOURCE TEST DATA

### RELATIVE TO SULFUR OXIDES[a]

$S = (\text{Max.} - \text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. Deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Boiler - coal fired (Test results taken from PEDCo Environmental files) (units in lbs/mm BTU) | 1.6<br>1.3<br>1.2<br>1.1 | 1.30 | 0.5 | 2.06 | 0.243 | 0.187 | 0.0935 |
| Boiler - coal fired (Test results taken from PEDCo Environmental files) (units in lbs/mm BTU) | 5.6<br>5.9<br>6.1<br>5.2 | 5.70 | 0.9 | 2.06 | 0.437 | 0.0767 | 0.0384 |
| Sludge incinerator (Waldwick, N.J.) (units in lb/ton) | 0.088<br>0.076<br>0.043 | 0.0690 | 0.045 | 1.69 | 0.0267 | 0.387 | 0.223 |
| Boiler - coal fired (Test results taken from PEDCo Environmental files) (units in lbs/mm BTU) | 3.6<br>4.3 | 3.95 | 0.7 | 1.13 | 0.619 | 0.157 | 0.111 |
| Sludge incinerator (Barstow, California) (units in lb/ton) | 0.46<br>0.74<br>0.72 | 0.640 | 0.28 | 1.69 | 0.167 | 0.261 | 0.151 |
| Sludge incinerator (So. Tahoe, California) (units in lb/ton) | 1.5<br>1.3<br>1.3 | 1.37 | 0.2 | 1.69 | 0.118 | 0.0861 | 0.0497 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-2 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO SULFUR OXIDES[a]

$S = (\text{Max.} - \text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. Deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Slude incinerator (Fairfax Co., Va.) (units in lb/ton) | 0.29<br>0.21<br>0.76 | 0.420 | 0.55 | 1.69 | 0.325 | 0.774 | 0.447 |
| Boiler - coal fired (Detroit Edison Power) (units in lb/ton) | 52 S<br>20 S<br>12 S<br>30 S | 28.5 S | 40.0 S | 2.06 | 19.4 S | 0.681 | 0.341 |
| Lead smelting (blast furnace) (Plant A) (units in lb/ton) | 27.3<br>23.6<br>15.3 | 22.1 | 12.0 | 1.69 | 7.10 | 0.321 | 0.185 |
| Lead smelting (inlet) (blast furnace) (Plant B) (units in lb/ton) | 127<br>66<br>205 | 133 | 139 | 1.69 | 82.2 | 0.618 | 0.357 |
| Lead smelting (blast furnace) (Plant C) (units in lb/ton) | 0.0049<br>0.0041<br>0.0082 | 0.00573 | 0.0041 | 1.69 | 0.00243 | 0.424 | 0.245 |
| Lead smelting (reverberatory furnace) (Plant G) (units in lb/ton) | 109<br>110<br>108 | 109 | 2.0 | 1.69 | 1.18 | 0.0108 | 0.00624 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-2 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO SULFUR OXIDES[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. Deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Lead smelting (reverberatory furnace) (Plant H) (units in lb/ton) | 200<br>197<br>159 | 185 | 41.0 | 1.69 | 24.3 | 0.131 | 0.0756 |
| Boiler - oil fired (Test results taken from PEDCo Environmental files) (units in lbs/mm BTU) | 0.92<br>0.71 | 0.815 | 0.21 | 1.13 | 0.186 | 0.228 | 0.280 |
| Sludge incinerator (Plant C) (units in lb/ton) | 1.56<br>1.47<br>1.36 | 1.46 | 0.20 | 1.69 | 0.118 | 0.0808 | 0.0466 |
| Sludge incinerator (Plant D) (units in lb/ton) | 0.459<br>0.738<br>0.992 | 0.7297 | 0.533 | 1.69 | 0.315 | 0.432 | 0.249 |
| Sludge incinerator (Plant E) (units in lb/ton) | 7.85<br>7.97<br>17.70 | 11.17 | 9.85 | 1.69 | 5.83 | 0.522 | 0.301 |
| Boiler - coal fired pulverized (Test results taken from PEDCo Environmental files) (units in lbs/mm BTU) | 3.55<br>3.83 | 3.69 | 0.28 | 1.13 | 0.248 | 0.0672 | 0.0475 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-2 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO SULFUR OXIDES[a]

$S = (\text{Max.} - \text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. Deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Boiler - coal fired pulverized (Test results taken from PEDCo Environmental files) (units in lbs/mm BTU) | 4.67<br>4.20 | 4.44 | 0.47 | 1.13 | 0.416 | 0.294 | 0.208 |
| Boiler - coal fired (Test results taken from PEECo Environmental files) (units in lbs/mm BTU) | 1.45<br>1.63 | 1.54 | 0.18 | 1.13 | 0.159 | 0.103 | 0.0728 |
| | | | | | | | Average 0.177 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

a) Data from U.S. EPA files unless otherwise noted.

Table D-3 PRECISION OF SOURCE TEST DATA RELATIVE TO NITROGEN OXIDES[a]

$S = (\text{Max.} - \text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Municipal incinerator (Brooklyn, New York) (units in lb/ton) | 1.3<br>2.0<br>2.0 | 1.76 | 0.7 | 1.69 | 0.414 | 0.235 | 0.136 |
| Sludge incinerator (Waldwick, N.J.) (units in lb/ton) | 1.31<br>1.58<br>1.47 | 1.45 | 0.27 | 1.69 | 0.160 | 0.110 | 0.0635 |
| Sludge incinerator (Monterey, California) (units in lb/ton) | 2.69<br>1.48<br>0.87 | 1.68 | 1.82 | 1.69 | 1.08 | 0.643 | 0.371 |
| Sludge incinerator (Barstow, Califronia) (untis in lb/ton) | 5.37<br>1.48<br>7.63 | 4.827 | 6.15 | 1.69 | 3.64 | 0.754 | 0.435 |
| Sludge incinerator (So. Tahoe, California) (units in lb/ton) | 21.40<br>5.85<br>5.38 | 10.9 | 16.0 | 1.69 | 9.47 | 0.869 | 0.502 |
| Sludge incinerator (Fairfax Co., Va.) (units in lb/ton) | 5.55<br>5.65<br>12.50 | 7.90 | 7.0 | 1.69 | 4.14 | 0.524 | 0.303 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-3 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO NITROGEN OXIDES[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Plant incinerator (Plant $A_1$) (units in lb/ton) | 0.16<br>0.19<br>0.22 | 0.190 | 0.06 | 1.69 | 0.0355 | 0.187 | 0.108 |
| Boiler - coal fired (Detroit Edison Power) (units in lb/ton) | 14.6<br>13.5<br>13.5<br>11.5 | 17.7 | 3.1 | 2.06 | 1.50 | 0.0847 | 0.0424 |
| Power plant boiler - n. gas fired (W.B.Tuttle-Unit 3) (units in lbs/mm BTU) | 0.0785<br>0.0626<br>0.0548 | 0.653 | 0.0237 | 1.69 | 0.0140 | 0.0214 | 0.0124 |
| Power plant boiler - n. gas fired (W.B.Tuttle-Unit 3) (units in lbs/mm BTU) | 0.1796<br>0.2184<br>0.2232 | 0.2071 | 0.0436 | 1.69 | 0.0258 | 0.125 | 0.0722 |
| Power plant boiler - n. gas fired (W.B.Tuttle-Unit 3) (units in lbs/mm BTU) | 0.3655<br>0.3635<br>0.3421 | 0.3570 | 0.0234 | 1.69 | 0.0138 | 0.0387 | 0.0223 |
| Power plant boiler - n. gas fired (W.B.Tuttle-Unit 2) (units in lbs/mm BTU) | 0.3807<br>0.3555<br>0.3555<br>0.3477 | 0.3599 | 0.0330 | 2.06 | 0.160 | 0.445 | 0.223 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-3 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO NITROGEN OXIDES[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Power plant boiler - n. gas fired (W.B.Tuttle-Unit 4) (units in lbs/mm BTU) | 0.1373<br>0.1341<br>0.1423<br>0.1417 | 0.1389 | 0.0082 | 2.06 | 0.00398 | 0.0287 | 0.0144 |
| Power plant boiler - n. gas fired (W.B.Tuttle-Unit 4) (units in lbs/mm BTU) | 0.1914<br>0.1806<br>0.1850<br>0.2263 | 0.1958 | 0.0457 | 2.06 | 0.0222 | 0.113 | 0.0567 |
| Power plant boiler - n. gas fired (W.B.Tuttle-Unit 4) (units in lbs/mm BTU) | 0.2049<br>0.1846<br>0.1919<br>0.2478 | 0.2073 | 0.0632 | 2.06 | 0.0307 | 0.148 | 0.074 |
| Power plant boiler - n. gas fired (W.B.Tuttle-Unit 4) (units in lbs/mm BTU) | 0.2293<br>0.2301<br>0.2375<br>0.2969 | 0.2484 | 0.0676 | 2.06 | 0.0328 | 0.132 | 0.066 |
| Power plant boiler - n. gas fired (V. H. Brauning - Unit 3) (units in lbs/mm BTU) | 0.18496<br>0.19780<br>0.19637 | 0.19304 | 0.0128 | 1.69 | 0.00757 | 0.0392 | 0.0226 |
| Phosphate rock calciner (Test results taken from PEDCo Environmental files) (units in lbs/mm BTU) | 140<br>149<br>153<br>126 | 142 | 27 | 2.06 | 13.1 | 0.0923 | 0.0462 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-3 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO NITROGEN OXIDES[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Power plant boiler n. gas fired (V. H. Brauning - Unit 3) (units in lbs/mm BTU) | 0.27880<br>0.32525<br>0.28454 | 0.29619 | 0.0465 | 1.69 | 0.0275 | 0.0928 | 0.0536 |
| Power plant boiler n. gas fired (V. H. Brauning - Unit 3) | 0.30904<br>0.35982<br>0.36454 | 0.34446 | 0.0555 | 1.69 | 0.0328 | 0.0952 | 0.0550 |
| | | | | | | | Average<br>0.134 |
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| | | | | | | | |

a) Data from U.S. EPA files unless otherwise noted.

Table D-4 PRECISION OF SOURCE TEST DATA

RELATIVE TO HYDROCARBONS[a]

* Reported lb/hr basis and constant product flow during tests.

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed* values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Lembo machine - coloring plastic Line PO-1 (Test results taken from PEDCo Environmental files) (units in lb/hr) | 85.1<br>85.8<br>80.5 | 83.8 | 5.3 | 1.69 | 3.14 | 0.0375 | 0.0217 |
| Lembo machine - coloring plastic Line PO-2 (Test results taken from PEDCo Environmental files) (units in lb/hr) | 119<br>117<br>122 | 119 | 5.0 | 1.69 | 2.96 | 0.0249 | 0.0144 |
| Lembo machine - coloring plastic Line PL-5 (Test results taken from PEDCo Environmental files) (units in lb/hr) | 37.0<br>39.5<br>34.2 | 36.9 | 5.3 | 1.69 | 3.14 | 0.0851 | 0.0491 |
| Lembo machine - coloring plastic Line PL-6 (Test results taken from PEDCo Environmental files) (units in lb/hr) | 17.7<br>18.7<br>19.0 | 18.5 | 1.3 | 1.69 | 0.769 | 0.0416 | 0.0240 |
| Lembo machine - coloring plastic Line PL-7 (Test results taken from PEDCo Environmental files) (units in lb/hr) | 21.7<br>27.6<br>30.2 | 26.5 | 8.5 | 1.69 | 5.03 | 0.190 | 0.110 |
| #1 calender machine-rolling presses which form plasticizing material into smooth thin sheets (units in lb/hr) (Test results taken from PEDCo-Environmental files) | 2.95<br>3.54 | 3.25 | 0.59 | 1.13 | 0.522 | 0.161 | 0.114 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-4 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO HYDROCARBONS[a]

* Reported lb/hr basis and constant product flow during tests.

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Strike-off printers (Test results taken from PEDCo Environmental files) (units in lb/hr) | 34.4<br>31.0 | 32.7 | 3.4 | 1.13 | 3.01 | 0.0920 | 0.0651 |
| C-2 oven 1 (plastic from lembo machine) (Test results taken from PEDCo Environmental files) (units in lb/hr) | 3.46<br>4.31<br>3.16 | 3.64 | 1.15 | 1.69 | 0.68 | 0.187 | 0.108 |
| Laminating embosser (Test results taken from PEDCo Environmental files) (units in lb/hr) | 16.9<br>17.7 | 17.3 | 0.8 | 1.13 | 0.708 | 0.0409 | 0.0289 |
| Lembo machine - coloring plastic Line PO-4 (Test results taken from PEDCo Environmental files) (units in lb/hr) | 56.7<br>54.5<br>60.7 | 57.3 | 6.2 | 1.69 | 3.67 | 0.0640 | 0.0369 |
| Sludge incinerator (Fairfax Co., Va.) (units in lb/ton) | 0.87<br>0.63<br>2.10 | 1.20 | 1.47 | 1.69 | 0.870 | 0.725 | 0.419 |
| Power plant boiler n. gas fired (W. B. Tuttle - Unit 3) (units in lbs/mm BTU) | 0.00026<br>0.00025<br>0.00247 | 0.000993 | 0.00222 | 1.69 | 0.00131 | 1.32 | 0.762 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-4 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO HYDROCARBONS[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

* Reported lb/hr basis and constant product flow during tests.

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Line 2 - lacquer spray (Test results taken from PEDCo Environmental files) (units in lb/hr) | 1.6<br>2.2 | 1.90 | 0.6 | 1.13 | 0.531 | 0.279 | 0.147 |
| Line 4 - Lacquer spray (Test results taken from PEDCo Environmental files) (units in lb/hr) | 2.6<br>1.9 | 2.25 | 0.7 | 1.13 | 0.619 | 0.275 | 0.122 |
| Line 4 & 5 - lacquer spray (Test results taken from PEDCo Environmental files) (units in lb/hr) | 4.8<br>5.7 | 5.25 | 0.9 | 1.13 | 0.796 | 0.152 | 0.107 |
| #404 Lacquer spray (Test results taken from PEDCo Environmental files) (units in lb/hr) | 19.4<br>20.7 | 20.1 | 1.3 | 1.13 | 1.15 | 0.0572 | 0.0404 |
| Power plant boiler - n. gas fired (W. B. Tuttle - #4) (units in lbs/mm BTU) | 0.00053<br>0.00822<br>0.00090<br>0.00113 | 0.00270 | 0.00769 | 2.06 | 0.00373 | 1.38 | 0.690 |
| Power plant boiler - n. gas fired (W. B. Tuttle - #4) (units in lbs/mm BTU) | 0.00004<br>0.00119<br>0.00131<br>0.00109 | 0.000908 | 0.00127 | 2.06 | 0.000617 | 0.680 | 0.340 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-4 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO HYDROCARBONS[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Power plant boiler n. gas fired (W. B. Tuttle - #4) (units in lbs/mm BTU) | 0.00010<br>0.00644<br>0.00197<br>0.00219 | 0.00268 | 0.00634 | 2.06 | 0.00308 | 1.15 | 0.575 |
| Power plant boiler n. gas fired (W. B. Tuttle - #1) (units in lbs/mm BTU) | 0.00021<br>0.00084<br>0.00084<br>0.00021 | 0.000525 | 0.00063 | 2.06 | 0.000306 | 0.583 | 0.292 |
| | | | | | | | Average<br>0.203 |
| | | | | | | | |
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| | | | | | | | |

a) Data from U.S. EPA files unless otherwise noted.

Table D-5 PRECISION OF SOURCE TEST DATA

RELATIVE TO CARBON MONOXIDE[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Power plant boiler n. gas fired (W. B. Tuttle - #2) (units in lbs/mm BTU) | 0.0007<br>0.0002<br>0.0005<br>0.0009 | 0.000575 | 0.0007 | 2.06 | 0.000340 | 0.591 | 0.296 |
| Power plant boiler n. gas fired (W. B. Tuttle - #2) (units in lbs/mm BTU) | 0.00121<br>0.00041<br>0.00062<br>0.00103 | 0.000818 | 0.00080 | 2.06 | 0.000388 | 0.474 | 0.237 |
| Power plant boiler n. gas fired (W. B. Tuttle - #2) (units in lbs/mm BTU) | 0.00041<br>0.00062<br>0.00081<br>0.00142<br>0.00104 | 0.000860 | 0.00101 | 2.33 | 0.000433 | 0.503 | 0.225 |
| Power plant boiler n. gas fired (W. B. Tuttle - #4) (units in lbs/mm BTU) | 0.0249<br>0.0027<br>0.0353<br>0.0020 | 0.0162 | 0.0333 | 2.06 | 0.0162 | 1.00 | 0.500 |
| Power plant boiler n. gas fired (W. B. Tuttle - #4) (units in lbs/mm BTU) | 0.0259<br>0.0127<br>0.0006<br>0.0010 | 0.0101 | 0.0253 | 2.06 | 0.0123 | 1.22 | 0.610 |
| Power plant boiler n. gas fired (W. B. Tuttle - #4) (units in lbs/mm BTU) | 0.0010<br>0.0020<br>0.0014 | 0.00110 | 0.0010 | 2.06 | 0.000485 | 0.441 | 0.221 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-5 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO CARBON MONOXIDE[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Power plant boiler n. gas fired (W. B. Tuttle - #4) (units in lbs/mm BTU) | 0.0006<br>0.0020<br>0.0010<br>0.0012 | 0.00120 | 0.0014 | 2.06 | 0.000680 | 0.567 | 0.284 |
| Power plant boiler n. gas fired (W. B. Tuttle - #4) (units in lbs/mm BTU) | 0.0014<br>0.0052<br>0.0012<br>0.0010 | 0.00220 | 0.0042 | 2.06 | 0.00204 | 0.927 | 0.464 |
| Power plant boiler n. gas fired (W. B. Tuttle - #4) (units in lbs/mm BTU) | 0.0028<br>0.0025<br>0.0002<br>0.0014 | 0.00173 | 0.0026 | 2.06 | 0.00126 | 0.728 | 0.364 |
| Power plant boiler n. gas fired (V. H. Braunig - #3) (units in lbs/mm BTU) | 0.00046<br>0.00023 | 0.000230 | 0.00046 | 1.69 | 0.000272 | 1.17 | 0.675 |
| Power plant boiler n. gas fired (V. H. Braunig - #3) (units in lbs/mm BTU) | 0.00338<br>0.00086<br>0.00064 | 0.00163 | 0.00274 | 1.69 | 0.00162 | 0.994 | 0.574 |
| Power plant boiler n. gas fired (V. H. Braunig - #3) (units in lbs/mm BTU) | 0.02519<br>0.01989<br>0.00743 | 0.01750 | 0.01776 | 1.69 | 0.0105 | 0.600 | 0.346 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-5 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO CARBON MONOXIDE[a]

$S = (\text{Max.}-\text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Catalytic cracker (Plant $A_2$) (units in lb/hr) | 8.0<br>7.2<br>8.8 | 8.00 | 1.6 | 1.69 | 0.947 | 0.118 | 0.0681 |
| Lead smelter (blast furnace) (Plant A) (units in lb/ton) | 136<br>80<br>134 | 117 | 56 | 1.69 | 33.1 | 0.283 | 0.163 |
| Lead smelter (blast furnace) (Plant B) (units in lb/ton) | 33<br>52<br>188 | 91.0 | 155 | 1.69 | 91.7 | 1.01 | 0.583 |
| Lead smelter (blast furnace) (Plant C) (units lb/ton) | 280<br>133<br>91 | 168 | 189 | 1.69 | 112 | 0.667 | 0.385 |
| Lead smelter (reverberatory furnace) (Plant G) (units in lb/ton) | 30.2<br>31.4<br>29.4 | 30.3 | 2.0 | 1.69 | 1.18 | 0.0389 | 0.0225 |
| Lead smelter (reverberatory furnace) (Plant H) (units in lb/ton) | 42.5<br>40.8<br>36.2 | 39.83 | 6.3 | 1.69 | 3.73 | 0.0936 | 0.0540 |

a) Data from U.S. EPA files unless otherwise noted.

Table D-5 (continued) PRECISION OF SOURCE TEST DATA

RELATIVE TO CARBON MONOXIDE[a]

$S = (\text{Max.} - \text{min.})/d_2$

$\sigma_{\bar{x}} = \frac{S}{\sqrt{n}}$

| Process | Observed values | Average, $\bar{x}$ | Max.-min. | Factor, $d_2$ | Std. deviation, S | $\frac{S}{\bar{x}}$ | $\frac{\sigma_{\bar{x}}}{\bar{x}}$ |
|---|---|---|---|---|---|---|---|
| Basic oxygen furnace (Plant $A_2$) (units in lb/ton) | 140<br>104<br>106 | 117 | 36 | 1.69 | 21.3 | 0.182 | 0.105 |
| Basic oxygen furnace (Plant B) (units in lb/ton) | 134<br>124<br>237 | 165 | 113 | 1.69 | 66.9 | 0.405 | 0.234 |
| | | | | | | | Average<br>0.321 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

a) Data from U.S. EPA files unless otherwise noted.

## Table E-1 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type: [X] Light-duty gasoline [ ] Heavy-duty gasoline  Road type: Urban  Pollutant: CO  Avg. speed: 25 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)^2}$ |
| 1 | 1973 | 19 | 2.15 | 0.00596 | 1.18 | 0.00309 | 0.00222 | 0.107 | 0.0000281 | 0.00245 | 0.81 | 0.00295 | 0.00449 | 1.9431 | 0.05709 | 0.01512 |
| 2 | 1972 | 19 | 2.15 | 0.00596 | 1.32 | 0.00517 | 0.00297 | 0.151 | 0.0000477 | 0.00209 | 0.81 | 0.00295 | 0.00449 | 3.0675 | 0.14594 | 0.01551 |
| 3 | 1971 | 34 | 6.88 | 0.00595 | 1.38 | 0.00617 | 0.00324 | 0.133 | 0.0000315 | 0.00178 | 0.81 | 0.00295 | 0.00449 | 5.0547 | 0.39500 | 0.01546 |
| 4 | 1970 | 36 | 7.79 | 0.00601 | 1.40 | 0.00633 | 0.00323 | 0.111 | 0.0000198 | 0.00161 | 0.81 | 0.00295 | 0.00449 | 4.5315 | 0.31500 | 0.01534 |
| 5 | 1969 | 39 | 5.48 | 0.00360 | 1.68 | 0.00220 | 0.00078 | 0.112 | 0.0000177 | 0.00141 | 0.81 | 0.00295 | 0.00449 | 5.9440 | 0.36320 | 0.01028 |
| 6 | 1968 | 46 | 19.6 | 0.00926 | 1.58 | 0.00153 | 0.00061 | 0.104 | 0.0000160 | 0.00148 | 0.81 | 0.00295 | 0.00449 | 6.1226 | 0.59378 | 0.01584 |
| 7 | 1967 | 87 | 23.0 | 0.00304 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 0.81 | 0.00295 | 0.00449 | 5.4967 | 0.28522 | 0.00944 |
| 8 | 1966 | 87 | 19.7 | 0.00260 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 0.81 | 0.00295 | 0.00449 | 4.4396 | 0.19789 | 0.01004 |
| 9 | 1965 | 87 | 20.4 | 0.00269 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 0.81 | 0.00295 | 0.00449 | 3.2416 | 0.12263 | 0.01167 |
| 10 | 1964 | 87 | 25.5 | 0.00337 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 0.81 | 0.00295 | 0.00449 | 1.9027 | 0.05575 | 0.01540 |
| 11 | 1963 | 87 | 29.7 | 0.00392 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 0.81 | 0.00295 | 0.00449 | 1.4094 | 0.04203 | 0.02116 |
| 12 | 1962 | 87 | 43.0 | 0.00568 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 0.81 | 0.00295 | 0.00449 | 0.8456 | 0.01919 | 0.02684 |
| 13 | 1961 & older | 87 | 16.3 | 0.002153 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | 0.81 | 0.00295 | 0.00449 | 2.5369 | 0.10175 | 0.02824 |
| | | | | | | | | | | | | | | $\sum =$ 46.5359 | 2.77447 | |

$e_i = c_i d_i m_i s_i$

$$Var(e_i)\ (e_i)^2 \left[\frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)^2}{(s_i)^2}\right]$$

$e_m = \sum e_i$, $Var(e_m) = \sum Var(e_i)$, $\sigma_{e_m} = \left[Var(e_m)\right]^{1/2}$

$e_{co}$ = 46.54

$Var(e_{co})$ = 2.774 , $\frac{\sigma_{e_{co}}}{e}$ = 0.0358

$\sigma_{e_{co}}$ = 1.666

## Table E-2 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type [X] Light-duty gasoline [ ] Heavy-duty gasoline  Road type Suburban  Pollutant CO

Avg speed 35 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(a)}{(a)^2}$ |
| 1 | 1973 | 19 | 2.15 | 0.00596 | 1.18 | 0.00309 | 0.00222 | 0.107 | 0.0000281 | 0.00245 | 0.60 | 0.00162 | 0.00449 | 1.4394 | .03133 | 0.01512 |
| 2 | 1972 | 19 | 2.15 | 0.00596 | 1.32 | 0.00517 | 0.00297 | 0.151 | 0.0000477 | 0.00209 | 0.60 | 0.00162 | 0.00449 | 2.2722 | .08008 | 0.01551 |
| 3 | 1971 | 34 | 6.88 | 0.00595 | 1.38 | 0.00617 | 0.00324 | 0.133 | 0.0000315 | 0.00178 | 0.60 | 0.00162 | 0.00449 | 3.7442 | .21673 | 0.01546 |
| 4 | 1970 | 36 | 7.79 | 0.00601 | 1.40 | 0.00633 | 0.00323 | 0.111 | 0.0000198 | 0.00161 | 0.60 | 0.00162 | 0.00449 | 3.3566 | .17283 | 0.01534 |
| 5 | 1969 | 39 | 5.48 | 0.00360 | 1.68 | 0.00220 | 0.00078 | 0.112 | 0.0000177 | 0.00141 | 0.60 | 0.00162 | 0.00449 | 4.4029 | .19928 | 0.01028 |
| 6 | 1968 | 46 | 19.6 | 0.00926 | 1.58 | 0.00153 | 0.00061 | 0.104 | 0.0000160 | 0.00148 | 0.60 | 0.00162 | 0.00449 | 4.5352 | .32580 | 0.01584 |
| 7 | 1967 | 87 | 23.0 | 0.00304 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 0.60 | 0.00162 | 0.00449 | 4.0716 | .15650 | 0.00944 |
| 8 | 1966 | 87 | 19.7 | 0.00260 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 0.60 | 0.00162 | 0.00449 | 3.2886 | .10858 | 0.01004 |
| 9 | 1965 | 87 | 20.4 | 0.00269 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 0.60 | 0.00162 | 0.00449 | 2.4012 | .06728 | 0.01167 |
| 10 | 1964 | 87 | 25.5 | 0.00337 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 0.60 | 0.00162 | 0.00449 | 1.4094 | .03059 | 0.01540 |
| 11 | 1963 | 87 | 29.7 | 0.00392 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 0.60 | 0.00162 | 0.00449 | 1.0440 | .023063 | 0.02116 |
| 12 | 1962 | 87 | 43.0 | 0.00568 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 0.60 | 0.00162 | 0.00449 | 0.6264 | .01053 | 0.02684 |
| 13 | 1961 & older | 87 | 16.3 | 0.002153 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | 0.60 | 0.00162 | 0.00449 | 1.8792 | .09973 | 0.02824 |
| | | | | | | | | | | | | | $\Sigma =$ | 34.4709 | 1.52212 | |

$e_i = c_i a_i m_i b_i$

$Var\ e_i = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$e_{co} = 34.47$

$Var(e_{co}) = 1.522$ , $\frac{\sigma_{e_{co}}}{e_{co}} = 0.0358$

$e_{co} = \sum e_i$ , $Var(e_{co}) = \sum Var(e_i)$ , $\sigma_{e_{co}} = [Var(e_{co})]^{1/2}$

$\sigma_{e_{co}} = 1.234$

## Table E-3 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type [X] Light-duty gasoline [ ] Heavy-duty gasoline  Road type Rural  Pollutant CO  Avg speed 45 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(x)}{(x)^2}$ |
| 1 | 1973 | 19 | 2.15 | 0.00596 | 1.18 | 0.00309 | 0.00222 | 0.107 | 0.0000281 | 0.00245 | 0.50 | 0.00112 | 0.00449 | 1.1995 | .02175 | 0.01512 |
| 2 | 1972 | 19 | 2.15 | 0.00596 | 1.32 | 0.00517 | 0.00297 | 0.151 | 0.0000477 | 0.00209 | 0.50 | 0.00112 | 0.00449 | 1.8935 | .05561 | 0.01551 |
| 3 | 1971 | 34 | 6.88 | 0.00595 | 1.38 | 0.00617 | 0.00324 | 0.133 | 0.0000315 | 0.00178 | 0.50 | 0.00112 | 0.00449 | 3.1202 | .15051 | 0 .546 |
| 4 | 1970 | 36 | 7.79 | 0.00601 | 1.40 | 0.00633 | 0.00323 | 0.111 | 0.0000198 | 0.00161 | 0.50 | 0.00112 | 0.00449 | 2.7972 | .12002 | 0.01534 |
| 5 | 1969 | 39 | 5.48 | 0.00360 | 1.68 | 0.00220 | 0.00078 | 0.112 | 0.0000177 | 0.00141 | 0.50 | 0.00112 | 0.00449 | 3.6691 | .13840 | 0.01028 |
| 6 | 1968 | 46 | 19.6 | 0.00926 | 1.58 | 0.00153 | 0.00061 | 0.104 | 0.0000160 | 0.00148 | 0.50 | 0.00112 | 0.00449 | 3.7794 | .22625 | 0.01584 |
| 7 | 1967 | 87 | 23.0 | 0.00304 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 0.50 | 0.00112 | 0.00449 | 3.3930 | .10868 | 0.00944 |
| 8 | 1966 | 87 | 19.7 | 0.00260 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 0.50 | 0.00112 | 0.00449 | 2.7405 | .07540 | 0.01004 |
| 9 | 1965 | 87 | 20.4 | 0.00269 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 0.50 | 0.00112 | 0.00449 | 2.0010 | .04673 | 0.01167 |
| 10 | 1964 | 87 | 25.5 | 0.00337 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 0.50 | 0.00112 | 0.00449 | 1.1745 | .02124 | 0.01540 |
| 11 | 1963 | 87 | 29.7 | 0.00392 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 0.50 | 0.00112 | 0.00449 | 0.87 | .01601 | 0.02116 |
| 12 | 1962 | 87 | 43.0 | 0.00568 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 0.50 | 0.00112 | 0.00449 | 0.522 | .00731 | 0.02684 |
| 13 | 1961 & older | 87 | 16.3 | 0.002153 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | 0.50 | 0.00112 | 0.00449 | 1.566 | .06925 | 0.02824 |
| | | | | | | | | | | | | | | $\sum =$ | 28.7259 | 1.05716 |

$e_i = c_i d_i m_i s_i$

$Var\ e_i = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$e_{co} = \sum e_i$ . $Var(e_{co}) = \sum Var(e_i)$ , $\sigma_{e_{co}} = \left[ Var(e_{co}) \right]^{1/2}$

$e_{co}$ = 28.73

$Var(e_{co})$ = 1.057 , $\frac{\sigma_{e_{co}}}{g}$ = 0.0358

$\sigma_{e_{co}}$ = 1.028

## Table E-4 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type [X] Light-duty gasoline [ ] Heavy-duty gasoline

Road type Limited Access Pollutant CO

Avg speed 55 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e)}{(e)^2}$ |
| 1 | 1973 | 19 | 2.15 | 0.00596 | 1.18 | 0.00309 | 0.00222 | 0.107 | 0.0000281 | 0.00245 | 0.44 | 0.000869 | 0.00449 | 1.0555 | .01684 | 0.01512 |
| 2 | 1972 | 19 | 2.15 | 0.00596 | 1.32 | 0.00517 | 0.00297 | 0.151 | 0.0000477 | 0.00209 | 0.44 | 0.000869 | 0.00449 | 1.6663 | .04306 | 0.01551 |
| 3 | 1971 | 34 | 6.88 | 0.00595 | 1.38 | 0.00617 | 0.00324 | 0.133 | 0.0000315 | 0.00178 | 0.44 | 0.000869 | 0.00449 | 2.7458 | .11656 | 0.01546 |
| 4 | 1970 | 36 | 7.79 | 0.00601 | 1.40 | 0.00633 | 0.00323 | 0.111 | 0.0000198 | 0.00161 | 0.44 | 0.000869 | 0.00449 | 2.4615 | .09295 | 0.01534 |
| 5 | 1969 | 39 | 5.48 | 0.00360 | 1.68 | 0.00220 | 0.00078 | 0.112 | 0.0000177 | 0.00141 | 0.44 | 0.000869 | 0.00449 | 3.2288 | .10717 | 0.01028 |
| 6 | 1968 | 46 | 19.6 | 0.00926 | 1.58 | 0.00153 | 0.00061 | 0.104 | 0.0000160 | 0.00148 | 0.44 | 0.000869 | 0.00449 | 3.3258 | .17521 | 0.01584 |
| 7 | 1967 | 87 | 23.0 | 0.00304 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 0.44 | 0.000869 | 0.00449 | 2.9858 | .08416 | 0.00944 |
| 8 | 1966 | 87 | 19.7 | 0.00260 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 0.44 | 0.000869 | 0.00449 | 2.4116 | .05839 | 0.01004 |
| 9 | 1965 | 87 | 20.4 | 0.00269 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 0.44 | 0.000869 | 0.00449 | 1.7609 | .03619 | 0.01167 |
| 10 | 1964 | 87 | 25.5 | 0.00337 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 0.44 | 0.000869 | 0.00449 | 1.0336 | .01645 | 0.01540 |
| 11 | 1963 | 87 | 29.7 | 0.00392 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 0.44 | 0.000869 | 0.00449 | 0.7656 | .01240 | 0.02116 |
| 12 | 1962 | 87 | 43.0 | 0.00568 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 0.44 | 0.000869 | 0.00449 | 0.4594 | .00566 | 0.02684 |
| 13 | 1961 & older | 87 | 16.3 | 0.002153 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | 0.44 | 0.000869 | 0.00449 | 1.3781 | .05363 | 0.02824 |
| | | | | | | | | | | | | | | $\Sigma =$ 25.2787 | .81867 | |

$e_i = c_i d_i m_i s_i$

$Var\ e_i \approx (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$e_n = \Sigma e_i$, $Var(e_n) = \Sigma Var(e_i)$, $\sigma_{e_n} = \left[Var(e_n)\right]^{1/2}$

$e_n$ = 25.28

$Var(e_n)$ = 0.8187, $\frac{\sigma_{e_n}}{e_n}$ = 0.0358

$\sigma_{e_n}$ = 0.9048

## Table B-5 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type: [x] Light-duty gasoline [ ] Heavy-duty gasoline  Road type: Urban  Pollutant: HC

Avg. speed: 25 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e)}{(e)^2}$ |
| 1 | 1973 | 2.7 | 0.0166 | 0.00228 | 1.05 | 0.000662 | 0.00060 | 0.107 | 0.0000281 | 0.00245 | 0.87 | 0.00119 | 0.00157 | 0.2639 | .0004805 | 0.0069 |
| 2 | 1972 | 2.7 | 0.0166 | 0.00228 | 1.10 | 0.000984 | 0.00081 | 0.151 | 0.0000477 | 0.00209 | 0.87 | 0.00119 | 0.00157 | 0.3902 | .00103 | 0.00675 |
| 3 | 1971 | 2.9 | 0.0192 | 0.00228 | 1.13 | 0.00134 | 0.00105 | 0.133 | 0.0000315 | 0.00178 | 0.87 | 0.00119 | 0.00157 | 0.3792 | .00096 | 0.00668 |
| 4 | 1970 | 3.6 | 0.0483 | 0.00373 | 1.15 | 0.00133 | 0.00100 | 0.111 | 0.0000198 | 0.00161 | 0.87 | 0.00119 | 0.00157 | 0.3998 | .00126 | 0.00791 |
| 5 | 1969 | 4.4 | 0.153 | 0.00790 | 1.23 | 0.000507 | 0.00034 | 0.112 | 0.0000177 | 0.00141 | 0.87 | 0.00119 | 0.00157 | 0.5273 | .00312 | 0.01122 |
| 6 | 1968 | 4.5 | 0.410 | 0.01980 | 1.28 | 0.000441 | 0.00027 | 0.104 | 0.0000160 | 0.00148 | 0.87 | 0.00119 | 0.00157 | 0.5212 | .00628 | 0.02312 |
| 7 | 1967 | 8.8 | 0.786 | 0.01015 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 0.87 | 0.00119 | 0.00157 | 0.5972 | .00486 | 0.01363 |
| 8 | 1966 | 8.8 | 0.672 | 0.00868 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 0.87 | 0.00119 | 0.00157 | 0.4823 | .00307 | 0.01320 |
| 9 | 1965 | 8.8 | 0.698 | 0.00901 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 0.87 | 0.00119 | 0.00157 | 0.3522 | .00187 | 0.01507 |
| 10 | 1964 | 8.8 | 0.872 | 0.01126 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 0.87 | 0.00119 | 0.00157 | 0.2067 | .00087 | 0.02037 |
| 11 | 1963 | 8.8 | 1.015 | 0.01311 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 0.87 | 0.00119 | 0.00157 | 0.1531 | .00064 | 0.02743 |
| 12 | 1962 | 8.8 | 1.469 | 0.01897 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 0.87 | 0.00119 | 0.00157 | 0.0919 | .00031 | 0.03721 |
| 13 | 1961 & older | 8.8 | 0.558 | 0.0072 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | 0.87 | 0.00119 | 0.00157 | 0.2756 | .00231 | 0.03037 |
| | | | | | | | | | | | | | | $\Sigma =$ 4.6406 | .02706 | |

$e_i = c_i d_i m_i s_i$

$e_{HC} = 4.641$

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$Var(e_{HC}) = 0.02706$, $\frac{\sigma_{e_{HC}}}{e_{HC}} = 0.035445$

$e_m = \sum e_i$, $Var(e_m) = \sum Var(e_i)$, $\sigma_{e_m} = [Var(e_m)]^{1/2}$

$\sigma_{e_{HC}} = 0.1645$

## Table E-6 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type ☒ Light-duty gasoline ☐ Heavy-duty gasoline  Road type Suburban  Pollutant HC

Avg speed 35 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e)}{(e)^2}$ |
| 1 | 1973 | 2.7 | 0.0166 | 0.00228 | 1.05 | 0.000662 | 0.00060 | 0.107 | 0.0000281 | 0.00245 | 0.68 | 0.000725 | 0.00157 | 0.2063 | .00029 | 0.0069 |
| 2 | 1972 | 2.7 | 0.0166 | 0.00228 | 1.10 | 0.000984 | 0.00081 | 0.151 | 0.0000477 | 0.00209 | 0.68 | 0.000725 | 0.00157 | 0.3050 | .00063 | 0.00675 |
| 3 | 1971 | 2.9 | 0.0192 | 0.00228 | 1.13 | 0.00134 | 0.00105 | 0.133 | 0.0000315 | 0.00178 | 0.68 | 0.000725 | 0.00157 | 0.2964 | .00059 | 0.00668 |
| 4 | 1970 | 3.6 | 0.0483 | 0.00373 | 1.15 | 0.00133 | 0.00100 | 0.111 | 0.0000198 | 0.00161 | 0.68 | 0.000725 | 0.00157 | 0.3125 | .00077 | 0.00791 |
| 5 | 1969 | 4.4 | 0.153 | 0.00790 | 1.23 | 0.000507 | 0.00034 | 0.112 | 0.0000177 | 0.00141 | 0.68 | 0.000725 | 0.00157 | 0.4122 | .00191 | 0.01122 |
| 6 | 1968 | 4.5 | 0.410 | 0.01980 | 1.28 | 0.000441 | 0.00027 | 0.104 | 0.0000160 | 0.00148 | 0.68 | 0.000725 | 0.00157 | 0.4073 | .00384 | 0.02312 |
| 7 | 1967 | 8.8 | 0.786 | 0.01015 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 0.68 | 0.000725 | 0.00157 | 0.4668 | .00297 | 0.01363 |
| 8 | 1966 | 8.8 | 0.672 | 0.00891 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 0.68 | 0.000725 | 0.00157 | 0.3770 | .00188 | 0.01320 |
| 9 | 1965 | 8.8 | 0.698 | 0.00901 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 0.68 | 0.000725 | 0.00157 | 0.2753 | .00114 | 0.01507 |
| 10 | 1964 | 8.8 | 0.872 | 0.01126 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 0.68 | 0.000725 | 0.00157 | 0.1616 | .00053 | 0.02037 |
| 11 | 1963 | 8.8 | 1.015 | 0.01311 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 0.68 | 0.000725 | 0.00157 | 0.1197 | .00039 | 0.02743 |
| 12 | 1962 | 8.8 | 1.469 | 0.01897 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 0.68 | 0.000725 | 0.00157 | 0.0718 | .00019 | 0.03721 |
| 13 | 1961 & older | 8.8 | 0.558 | 0.0072 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | 0.68 | 0.000725 | 0.00157 | 0.2154 | .00141 | 0.03037 |
| | | | | | | | | | | | | | $\Sigma =$ | 3.6273 | .01654 | |

$e_i = c_i d_i m_i s_i$

$e_{mc}$ 3.627

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$Var(e_{mc})$ 0.01654 , $\frac{\sigma_{e_{mc}}}{e_{mc}}$ = 0.03546

$e_m = \Sigma e_i$ , $Var(e_m) = \Sigma Var(e_i)$ , $\sigma_{e_m} = [Var(e_m)]^{1/2}$

$\sigma_{e_{mc}}$ = 0.1286

## Table E-7 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type: ☒ Light-duty gasoline ☐ Heavy-duty gasoline  Road type Rural  Pollutant HC

Avg speed 45 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)}$ |
| 1 | 1973 | 2.7 | 0.0166 | 0.00228 | 1.05 | 0.000662 | 0.00060 | 0.107 | 0.0000281 | 0.00245 | 0.58 | 0.000528 | 0.00157 | 0.1759 | .00021 | 0.0069 |
| 2 | 1972 | 2.7 | 0.0166 | 0.00228 | 1.10 | 0.000984 | 0.00081 | 0.151 | 0.0000477 | 0.00209 | 0.58 | 0.000528 | 0.00157 | 0.2601 | .00046 | 0.00675 |
| 3 | 1971 | 2.9 | 0.0192 | 0.00228 | 1.13 | 0.00134 | 0.00105 | 0.133 | 0.0000315 | 0.00178 | 0.58 | 0.000528 | 0.00157 | 0.2528 | .00043 | 0.00668 |
| 4 | 1970 | 3.6 | 0.0483 | 0.00373 | 1.15 | 0.00133 | 0.00100 | 0.111 | 0.0000198 | 0.00161 | 0.58 | 0.000528 | 0.00157 | 0.2665 | .00056 | 0.00791 |
| 5 | 1969 | 4.4 | 0.153 | 0.00790 | 1.23 | 0.000507 | 0.00034 | 0.112 | 0.0000177 | 0.00141 | 0.58 | 0.000528 | 0.00157 | 0.3516 | .00139 | 0.01122 |
| 6 | 1968 | 4.5 | 0.410 | 0.01980 | 1.28 | 0.000441 | 0.00027 | 0.104 | 0.0000160 | 0.00148 | 0.58 | 0.000528 | 0.00157 | 0.3474 | .00279 | 0.02312 |
| 7 | 1967 | 8.8 | 0.786 | 0.01015 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 0.58 | 0.000528 | 0.00157 | 0.3981 | .00216 | 0.01363 |
| 8 | 1966 | 8.8 | 0.672 | 0.00868 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 0.58 | 0.000528 | 0.00157 | 0.3216 | .00136 | 0.01320 |
| 9 | 1965 | 8.8 | 0.698 | 0.00901 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 0.58 | 0.000528 | 0.00157 | 0.2348 | .00083 | 0.01507 |
| 10 | 1964 | 8.8 | 0.872 | 0.01126 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 0.58 | 0.000528 | 0.00157 | 0.1378 | .00039 | 0.02037 |
| 11 | 1963 | 8.8 | 1.015 | 0.01311 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 0.58 | 0.000528 | 0.00157 | 0.1021 | .00029 | 0.02743 |
| 12 | 1962 | 8.8 | 1.469 | 0.01897 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 0.58 | 0.000528 | 0.00157 | 0.0612 | .00014 | 0.03721 |
| 13 | 1961 & older | 8.8 | 0.558 | 0.0072 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | 0.58 | 0.000528 | 0.00157 | 0.1837 | .00103 | 0.03037 |
| | | | | | | | | | | | | | | $\Sigma =$ | 3.0936 | 0.01204 |

$e_i = c_i d_i m_i s_i$

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$e_{HC} = 3.094$

$Var(e_{HC}) = 0.01204$ , $\frac{\sigma_{e_{HC}}}{e_{HC}} = 0.03546$

$e_{HC} = \Sigma e_i$ , $Var(e_{HC}) = \Sigma Var(e_i)$ , $\sigma_{e_{HC}} = [Var(e_{HC})]^{1/2}$

$\sigma_{e_{HC}} = 0.1097$

## Table E-8 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type [x] Light-duty gasoline [ ] Heavy-duty gasoline  Road type Limited Access  Pollutant HC

Avg. speed 55 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\frac{Var(e_i)}{(e_i)^2}$ |
| 1 | 1973 | 2.7 | 0.0166 | 0.00228 | 1.05 | 0.000662 | 0.00060 | 0.107 | 0.0000281 | 0.00245 | 0.50 | 0.000393 | 0.00157 | 0.1517 | .00016 | 0.0069 |
| 2 | 1972 | 2.7 | 0.0166 | 0.00228 | 1.10 | 0.000984 | 0.00081 | 0.151 | 0.0000477 | 0.00209 | 0.50 | 0.000393 | 0.00157 | 0.2242 | .00034 | 0.00675 |
| 3 | 1971 | 2.9 | 0.0192 | 0.00228 | 1.13 | 0.00134 | 0.00105 | 0.133 | 0.0000315 | 0.00178 | 0.50 | 0.000393 | 0.00157 | 0.2179 | .00032 | 0.00668 |
| 4 | 1970 | 3.6 | 0.0483 | 0.00373 | 1.15 | 0.00133 | 0.00100 | 0.111 | 0.0000198 | 0.00161 | 0.50 | 0.000393 | 0.00157 | 0.2298 | .00042 | 0.00791 |
| 5 | 1969 | 4.4 | 0.153 | 0.00790 | 1.23 | 0.000507 | 0.00034 | 0.132 | 0.0000177 | 0.00141 | 0.50 | 0.000393 | 0.00157 | 0.3031 | .00103 | 0.01122 |
| 6 | 1968 | 4.5 | 0.410 | 0.01980 | 1.28 | 0.000441 | 0.00027 | 0.104 | 0.0000160 | 0.00148 | 0.50 | 0.000393 | 0.00157 | 0.2995 | .00207 | 0.02312 |
| 7 | 1967 | 8.8 | 0.786 | 0.01015 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 0.50 | 0.000393 | 0.00157 | 0.3432 | .00161 | 0.01363 |
| 8 | 1966 | 8.8 | 0.672 | 0.00868 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 0.50 | 0.000393 | 0.00157 | 0.2772 | .00101 | 0.01320 |
| 9 | 1965 | 8.8 | 0.698 | 0.00901 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 0.50 | 0.000393 | 0.00157 | 0.2024 | .00062 | 0.01507 |
| 10 | 1964 | 8.8 | 0.872 | 0.01126 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 0.50 | 0.000393 | 0.00157 | 0.1188 | .00029 | 0.02037 |
| 11 | 1963 | 8.8 | 1.015 | 0.01311 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 0.50 | 0.000393 | 0.00157 | 0.0880 | .00021 | 0.02743 |
| 12 | 1962 | 8.8 | 1.469 | 0.01897 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 0.50 | 0.000393 | 0.00157 | 0.0528 | .00010 | 0.03721 |
| 13 | 1961 & older | 8.8 | 0.558 | 0.0072 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | 0.50 | 0.000393 | 0.00157 | 0.1584 | .00076 | 0.03037 |
| | | | | | | | | | | | | | | $\sum =$ 2.6670 | .00894 | |

$e_i = c_i d_i m_i s_i$

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$e_{HC} = \sum e_i$ , $Var(e_{HC}) = \sum Var(e_i)$ , $\sigma_{e_{HC}} = \left[ Var(e_{HC}) \right]^{1/2}$

$e_{HC}$ = 2.667

$Var(e_{HC})$ = 0.00894 , $\frac{\sigma_{e_{HC}}}{e_{HC}}$ = 0.03545

$\sigma_{e_{HC}}$ = 0.09455

## Table B-9 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type ☒ Light-duty gasoline ☐ Heavy-duty gasoline  Road type Urban  Pollutant $NO_x$  Avg speed 25 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)^2}$ |
| 1 | 1973 | 2.3 | .00719 | 0.00136 | 1.11 | | 0.00141[a] | 0.107 | 0.0000281 | 0.00245 | 1.05 | | 0.00303[b] | 0.2868 | .00068 | 0.00[illegible] |
| 2 | 1972 | 4.8 | 0.0313 | 0.00136 | 1.00 | 0.0 | 0.0 | 0.151 | 0.0000477 | 0.00209 | 1.05 | | 0.00303 | 0.76104 | .00375 | 0.00[illegible] |
| 3 | 1971 | 4.8 | 0.0313 | 0.00136 | 1.00 | 0.0 | 0.0 | 0.133 | 0.0000315 | 0.00178 | 1.05 | | 0.00303 | 0.6703 | .00277 | 0.00[illegible] |
| 4 | 1970 | 5.1 | 0.0324 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.111 | 0.0000198 | 0.00161 | 1.05 | | 0.00303 | 0.5944 | .00208 | 0.00[illegible] |
| 5 | 1969 | 5.5 | 0.0458 | 0.00151 | 1.00 | 0.0 | 0.0 | 0.112 | 0.0000177 | 0.00141 | 1.05 | | 0.00303 | 0.6468 | .00249 | 0.00[illegible] |
| 6 | 1968 | 4.3 | 0.0445 | 0.00241 | 1.00 | 0.0 | 0.0 | 0.104 | 0.0000160 | 0.00148 | 1.05 | | 0.00303 | 0.4696 | .00153 | 0.00692 |
| 7 | 1967 | 3.6 | 0.0503 | 0.00388 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 1.05 | | 0.00303 | 0.2948 | .00077 | 0.00882 |
| 8 | 1966 | 3.6 | 0.0430 | 0.00332 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 1.05 | | 0.00303 | 0.2381 | .00053 | 0.00930 |
| 9 | 1965 | 3.6 | 0.0447 | 0.00345 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 1.05 | | 0.00303 | 0.1739 | .00033 | 0.01095 |
| 10 | 1964 | 3.6 | 0.0558 | 0.00431 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 1.05 | | 0.00303 | 0.1021 | .00015 | 0.01490 |
| 11 | 1963 | 3.6 | 0.0650 | 0.00502 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 1.05 | | 0.00303 | 0.0756 | .00012 | 0.02080 |
| 12 | 1962 | 3.6 | 0.0940 | 0.00725 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 1.05 | | 0.00303 | 0.0454 | .00005 | 0.02695 |
| 13 | 1961 & older | 3.6 | 0.0357 | 0.00275 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | | | 0.00303 | 0.1361 | .00051 | 0.02738 |
| | | | | | | | | | | | | | | $\Sigma =$ 4.4949 | 0.01576 | |

$e_i = c_i d_i m_i s_i$

$Var(e_i) \approx (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$e_m = \sum e_i, \quad Var(e_m) = \sum Var(e_i), \quad \sigma_{e_m} = [Var(e_m)]^{1/2}$

$e_{mo_x} = 4.495$

$Var(e_{mo_x}) = 0.01576 \quad \frac{\sigma_{e_{mo_x}}}{e_{mo_x}} = 0.0279$

$\sigma_{e_{mo_x}} = 0.1255$

[a] The average precision of HC and CO deterioration factors was used. [b] The average precision of HC and CO speed correction factors was used.

## Table E-10 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type: [X] Light-duty gasoline [ ] Heavy-duty gasoline  Road type: Suburban  Pollutant: $NO_x$  Avg speed: 35 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)^2}$ |
| 1 | 1973 | 2.3 | .00719 | 0.00136 | 1.11 | | 0.00141[a] | 0.107 | 0.0000281 | 0.00245 | 1.19 | | 0.00303[b] | 0.3251 | .00087 | 0.00825 |
| 2 | 1972 | 4.8 | 0.0311 | 0.00136 | 1.00 | 0.0 | 0.0 | 0.151 | 0.0000477 | 0.00209 | 1.19 | | 0.00303 | 0.8625 | .00482 | 0.00648 |
| 3 | 1971 | 4.8 | 0.0311 | 0.00136 | 1.00 | 0.0 | 0.0 | 0.133 | 0.0000315 | 0.00178 | 1.19 | | 0.00303 | 0.7597 | .00356 | 0.00617 |
| 4 | 1970 | 5.1 | 0.0324 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.111 | 0.0000198 | 0.00161 | 1.19 | | 0.00303 | 0.6737 | .00267 | 0.00589 |
| 5 | 1969 | 5.5 | 0.0458 | 0.00151 | 1.00 | 0.0 | 0.0 | 0.112 | 0.0000177 | 0.00141 | 1.19 | | 0.00303 | 0.7330 | .00320 | 0.00595 |
| 6 | 1968 | 4.3 | 0.0445 | 0.00241 | 1.00 | 0.0 | 0.0 | 0.104 | 0.0000160 | 0.00148 | 1.19 | | 0.00303 | 0.5322 | .00196 | 0.00692 |
| 7 | 1967 | 3.6 | 0.0501 | 0.00388 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 1.19 | | 0.00303 | 0.3341 | .00098 | 0.00882 |
| 8 | 1966 | 3.6 | 0.0430 | 0.00332 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 1.19 | | 0.00303 | 0.2699 | .00068 | 0.00930 |
| 9 | 1965 | 3.6 | 0.0447 | 0.00345 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 1.19 | | 0.00303 | 0.1971 | .00042 | 0.01095 |
| 10 | 1964 | 3.6 | 0.0558 | 0.00431 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 1.19 | | 0.00303 | 0.1157 | .00020 | 0.01490 |
| 11 | 1963 | 3.6 | 0.0650 | 0.00502 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 1.19 | | 0.00303 | 0.0857 | .00015 | 0.02080 |
| 12 | 1962 | 3.6 | 0.0940 | 0.00725 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 1.19 | | 0.00303 | 0.0514 | .00007 | 0.02695 |
| 13 | 1961 & older | 3.6 | 0.0357 | 0.00275 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | 1.19 | | 0.00303 | 0.1542 | .00065 | 0.02738 |
| | | | | | | | | | | | | | | $\Sigma$ = 5.0943 | 0.02023 | |

$e_i = c_i d_i m_i s_i$

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$e_m = \Sigma e_i$, $Var(e_m) = \Sigma Var(e_i)$, $\sigma_{e_m} = \left[ Var(e_m) \right]^{1/2}$

$e_{mo} = 5.094$

$Var(e_{mo}) = 0.02023$, $\frac{\sigma_{e_{mo}}}{e_{mo}} = 0.0279$

$\sigma_{e_{mo}} = 0.1422$

[a] The average precision of HC and CO deterioration factors was used. [b] The average precision of HC and CO speed correction factors was used.

## Table B-11 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type [X] Light-duty gasoline [ ] Heavy-duty gasoline  Road type Rural  Pollutant $NO_x$  Avg speed 45 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)}$ |
| 1 | 1973 | 2.3 | .00719 | 0.00136 | 1.11 | | 0.00141[a] | 0.107 | 0.0000281 | 0.00245 | 1.31 | | 0.00303[b] | 0.3578 | .00106 | 0.00925 |
| 2 | 1972 | 4.8 | 0.0313 | 0.00136 | 1.00 | 0.0 | 0.0 | 0.151 | 0.0000477 | 0.00209 | 1.31 | | 0.00303 | 0.9495 | .00584 | 0.00848 |
| 3 | 1971 | 4.8 | 0.0313 | 0.00136 | 1.00 | 0.0 | 0.0 | 0.133 | 0.0000315 | 0.00178 | 1.31 | | 0.00303 | 0.8363 | .00432 | 0.00617 |
| 4 | 1970 | 5.1 | 0.0324 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.111 | 0.0000198 | 0.00161 | 1.31 | | 0.00303 | 0.7416 | .00324 | 0.00589 |
| 5 | 1969 | 5.5 | 0.0458 | 0.00151 | 1.00 | 0.0 | 0.0 | 0.112 | 0.0000177 | 0.00141 | 1.31 | | 0.00303 | 0.8070 | .00387 | 0.00595 |
| 6 | 1968 | 4.3 | 0.0445 | 0.00241 | 1.00 | 0.0 | 0.0 | 0.104 | 0.0000160 | 0.00148 | 1.31 | | 0.00303 | 0.5858 | .00237 | 0.00692 |
| 7 | 1967 | 3.6 | 0.0503 | 0.00388 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 1.31 | | 0.00303 | 0.3678 | .00119 | 0.00882 |
| 8 | 1966 | 3.6 | 0.0430 | 0.00331 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 1.31 | | 0.00303 | 0.2971 | .00082 | 0.00930 |
| 9 | 1965 | 3.6 | 0.0447 | 0.00345 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 1.31 | | 0.00303 | 0.2169 | .00052 | 0.01095 |
| 10 | 1964 | 3.6 | 0.0558 | 0.00430 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 1.31 | | 0.00303 | 0.1273 | .00024 | 0.01490 |
| 11 | 1963 | 3.6 | 0.0650 | 0.00502 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 1.31 | | 0.00303 | 0.0943 | .00019 | 0.02080 |
| 12 | 1962 | 3.6 | 0.0940 | 0.00725 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 1.31 | | 0.00303 | 0.0566 | .00009 | 0.02695 |
| 13 | 1961 & older | 3.6 | 0.0357 | 0.00275 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | 1.31 | | 0.00303 | 0.1698 | .00079 | 0.02738 |
| | | | | | | | | | | | | | | $\sum =$ 5.6078 | 0.02454 | |

$e_i = c_i d_i m_i s_i$

$Var(e_i) \approx (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$e_{NO_x} = \sum e_i$, $Var(e_{NO_x}) = \sum Var(e_i)$, $\sigma_{e_{NO_x}} = \left[ Var(e_{NO_x}) \right]^{1/2}$

$e_{NO_x} = 5.608$

$Var(e_{NO_x}) = 0.02454$, $\frac{\sigma_{e_{NO_x}}}{e_{NO_x}} = 0.0279$

$\sigma_{e_{NO_x}} = 0.1567$

[a] The average precision of HC and CO deterioration factors was used. [b] The average precision of HC and CO speed correction factors was used.

## Table E-12 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type [X] Light duty gasoline  Road type Limited Access  Pollutant $NO_X$

[ ] Heavy-duty gasoline  Avg speed 55 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)^2}$ |
| 1 | 1973 | 2.3 | .00719 | 0.00136 | 1.11 | | 0.00141[a] | 0.107 | 0.0000281 | 0.00245 | 1.45 | | 0.00303[b] | 0.3961 | .00129 | 0.00825 |
| 2 | 1972 | 4.8 | 0.0313 | 0.00136 | 1.00 | 0.0 | 0.0 | 0.151 | 0.0000477 | 0.00209 | 1.45 | | 0.00303 | 1.0510 | .00716 | 0.00648 |
| 3 | 1971 | 4.8 | 0.0313 | 0.00136 | 1.00 | 0.0 | 0.0 | 0.133 | 0.0000315 | 0.00178 | 1.45 | | 0.00303 | 0.9257 | .00529 | 0.00617 |
| 4 | 1970 | 5.1 | 0.0324 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.111 | 0.0000198 | 0.00161 | 1.45 | | 0.00303 | 0.8208 | .00397 | 0.00589 |
| 5 | 1969 | 5.5 | 0.0458 | 0.00151 | 1.00 | 0.0 | 0.0 | 0.112 | 0.0000177 | 0.00141 | 1.45 | | 0.00303 | 0.8932 | .00475 | 0.00595 |
| 6 | 1968 | 4.3 | 0.0445 | 0.00241 | 1.00 | 0.0 | 0.0 | 0.104 | 0.0000160 | 0.00148 | 1.45 | | 0.00303 | 0.6484 | .00291 | 0.00692 |
| 7 | 1967 | 3.6 | 0.0503 | 0.00388 | 1.00 | 0.0 | 0.0 | 0.078 | 0.0000116 | 0.00191 | 1.45 | | 0.00303 | 0.4072 | .00146 | 0.00882 |
| 8 | 1966 | 3.6 | 0.0430 | 0.00332 | 1.00 | 0.0 | 0.0 | 0.063 | 0.0000117 | 0.00295 | 1.45 | | 0.00303 | 0.3289 | .00101 | 0.00930 |
| 9 | 1965 | 3.6 | 0.0447 | 0.00345 | 1.00 | 0.0 | 0.0 | 0.046 | 0.0000095 | 0.00449 | 1.45 | | 0.00303 | 0.2401 | .00063 | 0.01095 |
| 10 | 1964 | 3.6 | 0.0558 | 0.00431 | 1.00 | 0.0 | 0.0 | 0.027 | 0.0000055 | 0.00754 | 1.45 | | 0.00303 | 0.1409 | .00030 | 0.01490 |
| 11 | 1963 | 3.6 | 0.0650 | 0.00502 | 1.00 | 0.0 | 0.0 | 0.020 | 0.0000051 | 0.01275 | 1.45 | | 0.00303 | 0.1044 | .00023 | 0.02080 |
| 12 | 1962 | 3.6 | 0.0940 | 0.00725 | 1.00 | 0.0 | 0.0 | 0.012 | 0.0000024 | 0.01667 | 1.45 | | 0.00303 | 0.0626 | .00011 | 0.02695 |
| 13 | 1961 & older | 3.6 | 0.0357 | 0.00275 | 1.00 | 0.0 | 0.0 | 0.036 | 0.0000280 | 0.02160 | 1.45 | | 0.00303 | 0.1879 | .00097 | 0.02738 |
| | | | | | | | | | | | | | $\sum$= | 6.2072 | 0.03008 | |

$e_i = c_i d_i m_i s_i$

$Var(e_i) \approx (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$e_{NO_x} = 6.207$

$Var(e_{NO_x}) = 0.03008$ , $\frac{\sigma_{e_{NO_x}}}{e_{NO_x}} = 0.0279$

$e_M = \sum e_i$ , $Var(e_M) = \sum Var(e_i)$ , $\sigma_{e_M} = [Var(e_M)]^{1/2}$

$\sigma_{e_{NO_x}} = 0.1734$

[a] The average precision of HC and CO deterioration factors was used. [b] The average precision of HC and CO speed correction factors was used.

## Table F-1 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type ☐ Light-duty gasoline ☒ Heavy-duty gasoline  Road type Urban  Pollutant CO

Avg speed 25 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$* | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)^2}$ |
| 1 | 1973 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 0.81 | 0.00295 | 0.00449 | 11.3 | 2.13 | 0.01660 |
| 2 | 1972 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 0.81 | 0.00295 | 0.00449 | 16.7 | 4.64 | 0.01665 |
| 3 | 1971 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 0.81 | 0.00295 | 0.00449 | 12.6 | 2.57 | 0.01621 |
| 4 | 1970 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 0.81 | 0.00295 | 0.00449 | 11.8 | 2.26 | 0.01621 |
| 5 | 1969 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 0.81 | 0.00295 | 0.00449 | 10.8 | 0.638 | 0.00547 |
| 6 | 1968 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 0.81 | 0.00295 | 0.00449 | 9.75 | 0.520 | 0.00547 |
| 7 | 1967 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 0.81 | 0.00295 | 0.00449 | 7.03 | 0.270 | 0.00547 |
| 8 | 1966 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 0.81 | 0.00295 | 0.00449 | 5.90 | 0.190 | 0.00547 |
| 9 | 1965 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 0.81 | 0.00295 | 0.00449 | 4.20 | 0.0947 | 0.00537 |
| 10 | 1964 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 0.81 | 0.00295 | 0.00449 | 3.18 | 0.0543 | 0.00537 |
| 11 | 1963 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 0.81 | 0.00295 | 0.00449 | 2.04 | 0.0223 | 0.00537 |
| 12 | 1962 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 0.81 | 0.00295 | 0.00449 | 1.81 | 0.0176 | 0.00537 |
| 13 | 1961 & older | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 0.81 | 0.00295 | 0.00449 | 12.20 | 0.799 | 0.00537 |
| | | | | | | | | | | | | | | $\sum =$ | 109.30 | 14.21 |

$e_i = c_i d_i m_i s_i$

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$e_n = \sum e_i$, $Var(e_n) = \sum Var(e_i)$, $\sigma_{e_n} = \left[ Var(e_n) \right]^{1/2}$

$\bar{e}$ = 109.3

$Var(e)$ = 14.21, $\frac{\sigma_e}{\bar{e}}$ = 0.03449

$\sigma_e$ = 3.770

* Speed correction factors same as for light-duty gasoline vehicles.

## Table F-2 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type ☐ Light-duty gasoline ☒ Heavy-duty gasoline  Road type Suburban  Pollutant CO  Avg speed 35 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ * | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(a)}{a^2}$ |
| 1 | 1973 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 0.60 | 0.00162 | 0.00449 | 8.35 | 1.16 | 0.01665 |
| 2 | 1972 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 0.60 | 0.00162 | 0.00449 | 12.40 | 2.56 | 0.01665 |
| 3 | 1971 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 0.60 | 0.00162 | 0.00449 | 9.36 | 1.42 | 0.01621 |
| 4 | 1970 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 0.60 | 0.00162 | 0.00449 | 8.75 | 1.24 | 0.01621 |
| 5 | 1969 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 0.60 | 0.00162 | 0.00449 | 7.98 | 0.348 | 0.00547 |
| 6 | 1968 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 0.60 | 0.00162 | 0.00449 | 7.22 | 0.285 | 0.00547 |
| 7 | 1967 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 0.60 | 0.00162 | 0.00449 | 5.21 | 0.148 | 0.00547 |
| 8 | 1966 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 0.60 | 0.00162 | 0.00449 | 4.37 | 0.104 | 0.00547 |
| 9 | 1965 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 0.60 | 0.00162 | 0.00449 | 3.11 | 0.0519 | 0.00537 |
| 10 | 1964 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 0.60 | 0.00162 | 0.00449 | 2.35 | 0.0297 | 0.00537 |
| 11 | 1963 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 0.60 | 0.00162 | 0.00449 | 1.51 | 0.0122 | 0.00537 |
| 12 | 1962 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 0.60 | 0.00162 | 0.00449 | 1.34 | 0.00964 | 0.00537 |
| 13 | 1961 & older | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 0.60 | 0.00162 | 0.00449 | 9.07 | 0.442 | 0.00537 |
| | | | | | | | | | | | | | $\sum$ = | 81.00 | 7.81 | |

$e_i = c_i d_i m_i s_i$  $e$ = 81.0

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$  $Var(e)$ = 7.81, $\frac{\sigma_e}{e}$ = 0.03444

$e_n = \sum e_i$, $Var(e_n) = \sum Var(e_i)$, $\sigma_{e_n} = [Var(e_n)]^{1/2}$  $\sigma_e$ = 2.79

* Speed correction factors same as for light-duty gasoline vehicles.

## Table F-1 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type: ☐ Light-duty gasoline ☒ Heavy-duty gasoline  Road type: Rural  Pollutant: CO

Avg speed: 45 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ [a] | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)^2}$ |
| 1 | 1973 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 0.50 | 0.00112 | 0.00449 | 6.96 | 0.807 | 0.01665 |
| 2 | 1972 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 0.50 | 0.00112 | 0.00449 | 10.30 | 1.77 | 0.01665 |
| 3 | 1971 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 0.50 | 0.00112 | 0.00449 | 7.80 | 0.986 | 0.01621 |
| 4 | 1970 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 0.50 | 0.00112 | 0.00449 | 7.28 | 0.859 | 0.01621 |
| 5 | 1969 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 0.50 | 0.00112 | 0.00449 | 6.65 | 0.242 | 0.00547 |
| 6 | 1968 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 0.50 | 0.00112 | 0.00449 | 6.02 | 0.198 | 0.00547 |
| 7 | 1967 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 0.50 | 0.00112 | 0.00449 | 4.34 | 0.103 | 0.00547 |
| 8 | 1966 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 0.50 | 0.00112 | 0.00449 | 3.64 | 0.0725 | 0.00547 |
| 9 | 1965 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 0.50 | 0.00112 | 0.00449 | 2.59 | 0.0360 | 0.00537 |
| 10 | 1964 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 0.50 | 0.00112 | 0.00449 | 1.96 | 0.0206 | 0.00537 |
| 11 | 1963 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 0.50 | 0.00112 | 0.00449 | 1.26 | 0.00853 | 0.00537 |
| 12 | 1962 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 0.50 | 0.00112 | 0.00449 | 1.12 | 0.00674 | 0.00537 |
| 13 | 1961 & older | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 0.50 | 0.00112 | 0.00449 | 7.56 | 0.307 | 0.00537 |
| | | | | | | | | | | | | | | $\Sigma =$ 67.50 | 5.42 | |

$e_i = c_i d_i m_i s_i$

$e = 67.50$

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$Var(e) = 5.42$, $\frac{\sigma_0}{e} = 0.03452$

$e_n = \sum e_i$, $Var(e_n) = \sum Var(e_i)$, $\sigma_{e_n} = [Var(e_n)]^{1/2}$

$\sigma_0 = 2.33$

[a] Speed correction factors same as for light-duty gasoline vehicles.

## Table F-4 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type ☐ Light-duty gasoline ☒ Heavy-duty gasoline

Road type Limited Access Pollutant CO

Avg speed 55 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$* | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e)}{(e)^2}$ |
| 1 | 1973 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 0.44 | 0.000869 | 0.00449 | 6.12 | 0.624 | 0.01665 |
| 2 | 1972 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 0.44 | 0.000869 | 0.00449 | 9.09 | 1.38 | 0.01665 |
| 3 | 1971 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 0.44 | 0.000869 | 0.00449 | 6.86 | 0.763 | 0.01621 |
| 4 | 1970 | 130 | 194 | 0.01147 | 1.0 | 0 | 0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 0.44 | 0.000869 | 0.00449 | 6.41 | 0.666 | 0.01621 |
| 5 | 1969 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 0.44 | 0.000869 | 0.00449 | 5.85 | 0.187 | 0.00547 |
| 6 | 1968 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 0.44 | 0.000869 | 0.00449 | 5.30 | 0.154 | 0.00547 |
| 7 | 1967 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 0.44 | 0.000869 | 0.00449 | 3.82 | 0.0798 | 0.00547 |
| 8 | 1966 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 0.44 | 0.000869 | 0.00449 | 3.20 | 0.0560 | 0.00547 |
| 9 | 1965 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 0.44 | 0.000869 | 0.00449 | 2.28 | 0.0279 | 0.00537 |
| 10 | 1964 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 0.44 | 0.000869 | 0.00449 | 1.72 | 0.0159 | 0.00537 |
| 11 | 1963 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 0.44 | 0.000869 | 0.00449 | 1.11 | 0.00662 | 0.00537 |
| 12 | 1962 | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 0.44 | 0.000869 | 0.00449 | 0.986 | 0.00522 | 0.00537 |
| 13 | 1961 & older | 140 | 15.9 | 0.00081 | 1.0 | 0 | 0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 0.44 | 0.000869 | 0.00449 | 6.65 | 0.237 | 0.00537 |
| | | | | | | | | | | | | | | $\Sigma$ = 59.40 | 4.20 | |

$e_i = c_i d_i m_i s_i$

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$e = 59.40$

$Var(e) = 4.20$ , $\frac{\sigma_e}{e} = 0.03451$

$e_a = \sum e_i$ , $Var(e_a) = \sum Var(e_i)$ ; $\sigma_{e_a} = \left[ Var(e_a) \right]^{\frac{1}{2}}$

$\sigma_e = 2.05$

* Speed correction factors same as for light-duty gasoline vehicles.

## Table F-5 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type ☐ Light-duty gasoline ☒ Heavy-duty gasoline  Road type Urban  Pollutant HC  Avg speed 25 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ [a] | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)^2}$ |
| 1 | 1973 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 0.87 | 0.00119 | 0.00157 | 1.49 | 0.0155 | 0.00698 |
| 2 | 1972 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 0.87 | 0.00119 | 0.00157 | 2.21 | 0.0341 | 0.00698 |
| 3 | 1971 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 0.87 | 0.00119 | 0.00157 | 1.67 | 0.0182 | 0.00654 |
| 4 | 1970 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 0.87 | 0.00119 | 0.00157 | 1.56 | 0.0159 | 0.00654 |
| 5 | 1969 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 0.87 | 0.00119 | 0.00157 | 1.41 | 0.00533 | 0.00268 |
| 6 | 1968 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 0.87 | 0.00119 | 0.00157 | 1.27 | 0.00432 | 0.00268 |
| 7 | 1967 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 0.87 | 0.00119 | 0.00157 | 0.917 | 0.00225 | 0.00268 |
| 8 | 1966 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 0.87 | 0.00119 | 0.00157 | 0.769 | 0.00158 | 0.00268 |
| 9 | 1965 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 0.87 | 0.00119 | 0.00157 | 0.547 | 0.000772 | 0.00258 |
| 10 | 1964 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 0.87 | 0.00119 | 0.00157 | 0.414 | 0.000442 | 0.00258 |
| 11 | 1963 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 0.87 | 0.00119 | 0.00157 | 0.266 | 0.000182 | 0.00258 |
| 12 | 1962 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 0.87 | 0.00119 | 0.00157 | 0.237 | 0.000145 | 0.00258 |
| 13 | 1961 & older | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 0.87 | 0.00119 | 0.00157 | 1.600 | 0.006600 | 0.00258 |

$e_i = c_i d_i m_i s_i$ $\qquad e = 14.36$ $\qquad \sum = 14.36 \quad 0.1053$

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$ $\qquad Var(e) = 0.1053$ , $\frac{\sigma_e}{e} = 0.0226$

$e_m = \sum e_i$ , $Var(e_m) = \sum Var(e_i)$ , $\sigma_{e_m} = \left[ Var(e_m) \right]^{1/2}$ $\qquad \sigma_e = 0.3245$

[a] Speed correction factors same as for light-duty gasoline vehicles.

## Table F-6 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type ☐ Light-duty gasoline ☒ Heavy-duty gasoline  Road type Suburban  Pollutant HC  Avg speed 35 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$* | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)^2}$ |
| 1 | 1973 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 0.68 | 0.000725 | 0.00157 | 1.16 | 0.00939 | 0.00698 |
| 2 | 1972 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 0.68 | 0.000725 | 0.00157 | 1.73 | 0.0209 | 0.00698 |
| 3 | 1971 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 0.68 | 0.000725 | 0.00157 | 1.31 | 0.0112 | 0.00654 |
| 4 | 1970 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 0.68 | 0.000725 | 0.00157 | 1.22 | 0.00973 | 0.00654 |
| 5 | 1969 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 0.68 | 0.000725 | 0.00157 | 1.10 | 0.00324 | 0.00268 |
| 6 | 1968 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 0.68 | 0.000725 | 0.00157 | 0.994 | 0.00265 | 0.00268 |
| 7 | 1967 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 0.68 | 0.000725 | 0.00157 | 0.717 | 0.00138 | 0.00268 |
| 8 | 1966 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 0.68 | 0.000725 | 0.00157 | 0.601 | 0.000968 | 0.00268 |
| 9 | 1965 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 0.68 | 0.000725 | 0.00157 | 0.428 | 0.000473 | 0.00258 |
| 10 | 1964 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 0.68 | 0.000725 | 0.00157 | 0.324 | 0.000271 | 0.00258 |
| 11 | 1963 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 0.68 | 0.000725 | 0.00157 | 0.208 | 0.000112 | 0.00258 |
| 12 | 1962 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 0.68 | 0.000725 | 0.00157 | 0.185 | 0.0000883 | 0.00258 |
| 13 | 1961 & older | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 0.68 | 0.000725 | 0.00157 | 1.250 | 0.00403 | 0.00258 |
| | | | | | | | | | | | | | | $\sum$ = 11.23 | 0.0644 | |

$e_i$: $c_i, d_i, m_i, s_i$

$e$ = 11.23

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$Var(e)$ = 0.0644 , $\frac{\sigma_e}{e}$ = 0.0226

$e_n = \sum e_i$ , $Var(e_n) = \sum Var(e_i)$ , $\sigma_{e_n} = \left[ Var(e_n) \right]^{1/2}$

$\sigma_e$ = 0.254

* Speed correction factors same as for light-duty gasoline vehicles.

## Table F-7 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type: ☐ Light-duty gasoline ☒ Heavy-duty gasoline  Road type: Rural  Pollutant: HC

Avg speed: 45 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ [a] | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e)}{(e)^2}$ |
| 1 | 1973 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 0.58 | 0.000528 | 0.00157 | 0.993 | 0.00688 | 0.00698 |
| 2 | 1972 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 0.58 | 0.000528 | 0.00157 | 1.48 | 0.0153 | 0.00698 |
| 3 | 1971 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 0.58 | 0.000528 | 0.00157 | 1.11 | 0.00806 | 0.00654 |
| 4 | 1970 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 0.58 | 0.000528 | 0.00157 | 1.04 | 0.00707 | 0.00654 |
| 5 | 1969 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 0.58 | 0.000528 | 0.00157 | 0.937 | 0.00235 | 0.00268 |
| 6 | 1968 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 0.58 | 0.000528 | 0.00157 | 0.848 | 0.00193 | 0.00268 |
| 7 | 1967 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 0.58 | 0.000528 | 0.00157 | 0.611 | 0.00100 | 0.00268 |
| 8 | 1966 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 0.58 | 0.000528 | 0.00157 | 0.513 | 0.000705 | 0.00268 |
| 9 | 1965 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 0.58 | 0.000528 | 0.00157 | 0.365 | 0.000344 | 0.00258 |
| 10 | 1964 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 0.58 | 0.000528 | 0.00157 | 0.277 | 0.000198 | 0.00258 |
| 11 | 1963 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 0.58 | 0.000528 | 0.00157 | 0.177 | 0.0000808 | 0.00258 |
| 12 | 1962 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 0.58 | 0.000528 | 0.00157 | 0.158 | 0.0000644 | 0.00258 |
| 13 | 1961 & older | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 0.58 | 0.000528 | 0.00157 | 1.060 | 0.00290 | 0.00258 |
| | | | | | | | | | | | | | | $\Sigma =$ 9.57 | 0.0469 | |

$e_i = c_i d_i m_i s_i$ $\qquad e = 9.57$

$Var(e_i) = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$ $\qquad Var(e) = 0.0469$, $\frac{\sigma_e}{e} = 0.0227$

$e_n = \sum e_i$, $\quad Var(e_n) = \sum Var(e_i)$, $\quad \sigma_{e_n} = \left[ Var(e_n) \right]^{1/2}$ $\qquad \sigma_e = 0.217$

[a] Speed correction factors same as for light-duty gasoline vehicles.

## Table F-8 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

☐ Motorcycle type ☐ Light duty gasoline ☒ Heavy duty gasoline  Road type Limited Access  Pollutant HC  Avg speed 55 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$* | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\frac{Var(e_i)}{(e_i)^2}$ |
| 1 | 1973 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 0.50 | 0.000393 | 0.00157 | 0.856 | 0.00511 | 0.00698 |
| 2 | 1972 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 0.50 | 0.000393 | 0.00157 | 1.27 | 0.0113 | 0.00698 |
| 3 | 1971 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 0.50 | 0.000393 | 0.00157 | 0.960 | 0.00603 | 0.00654 |
| 4 | 1970 | 16 | 1.21 | 0.00472 | 1.00 | 0.0 | 0.0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 0.50 | 0.000393 | 0.00157 | 0.896 | 0.00525 | 0.00654 |
| 5 | 1969 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 0.50 | 0.000393 | 0.00157 | 0.808 | 0.00175 | 0.00268 |
| 6 | 1968 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 0.50 | 0.000393 | 0.00157 | 0.731 | 0.00143 | 0.00268 |
| 7 | 1967 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 0.50 | 0.000393 | 0.00157 | 0.527 | 0.000744 | 0.00268 |
| 8 | 1966 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 0.50 | 0.000393 | 0.00157 | 0.442 | 0.000524 | 0.00268 |
| 9 | 1965 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 0.50 | 0.000393 | 0.00157 | 0.315 | 0.000256 | 0.00258 |
| 10 | 1964 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 0.50 | 0.000393 | 0.00157 | 0.238 | 0.000146 | 0.00258 |
| 11 | 1963 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 0.50 | 0.000393 | 0.00157 | 0.153 | 0.0000603 | 0.00258 |
| 12 | 1962 | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 0.50 | 0.000393 | 0.00157 | 0.136 | 0.0000477 | 0.00258 |
| 13 | 1961 & older | 17 | 0.272 | 0.00094 | 1.00 | 0.0 | 0.0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 0.50 | 0.000393 | 0.00157 | 0.918 | 0.00217 | 0.00258 |
| | | | | | | | | | | | | | $\sum =$ | 8.25 | 0.0348 | |

$e_i = (c_i)(d_i)(s_i)$ $\quad e = 8.25$

$Var(e_i) = e^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$ $\quad Var(e) = 0.0348 \quad , \frac{\sigma_e}{e} = 0.0227$

$e_n = \sum e_i$ , $Var(e_n) = \sum Var(e_i)$ , $\sigma_{e_n} = \left[ Var(e_n) \right]^{1/2}$ $\quad \sigma_e = 0.187$

* Speed correction factors same as for light-duty gasoline vehicles.

## Table F-9 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type ☐ Light-duty gasoline ☒ Heavy-duty gasoline  Road type Urban  Pollutant $NO_x$

Avg speed 25 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ [a] | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)}$ |
| 1 | 1973 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 1.05 | | 0.00303 [b] | 1.03 | 0.0103 | 0.00974 |
| 2 | 1972 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 1.05 | | 0.00303 | 1.54 | 0.0231 | 0.00974 |
| 3 | 1971 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 1.05 | | 0.00303 | 1.16 | 0.0125 | 0.00930 |
| 4 | 1970 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 1.05 | | 0.00303 | 1.08 | 0.0108 | 0.00930 |
| 5 | 1969 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 1.05 | | 0.00303 | 0.938 | 0.00392 | 0.00445 |
| 6 | 1968 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 1.05 | | 0.00303 | 0.849 | 0.00321 | 0.00445 |
| 7 | 1967 | 9.4 | 0.10 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 1.05 | | 0.00303 | 0.612 | 0.00167 | 0.00445 |
| 8 | 1966 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 1.05 | | 0.00303 | 0.513 | 0.00117 | 0.00445 |
| 9 | 1965 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 1.05 | | 0.00303 | 0.365 | 0.000580 | 0.00435 |
| 10 | 1964 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 1.05 | | 0.00303 | 0.276 | 0.000331 | 0.00435 |
| 11 | 1963 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 1.05 | | 0.00303 | 0.178 | 0.000138 | 0.00435 |
| 12 | 1962 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 1.05 | | 0.00303 | 0.158 | 0.000109 | 0.00435 |
| 13 | 1961 & older | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 1.05 | | 0.00303 | 1.070 | 0.000498 | 0.00435 |
| | | | | | | | | | | | | | | $e$ = 9.77 | | $\sum$ = 9.77 | 0.0728 |

$e_i = c_i d_i m_i s_i$

$Var\ e_i = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$

$Var(e) = 0.0728$, $\frac{\sigma_e}{e} = 0.0276$

$e_m = \sum e_i$, $Var(e_m) = \sum Var(e_i)$, $\sigma_{e_m} = \left[ Var(e_m) \right]^{1/2}$

$\sigma_e = 0.270$

[a] Speed correction factors same as for light-duty gasoline vehicles. [b] The average precision of HC and CO speed correction factors was used.

## Table P-10 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type ☐ Light duty gasoline ☒ Heavy duty gasoline — Road type Suburban — Pollutant $NO_x$ — Avg speed 15 mph

| Age | Model year | Emission rate, $c_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ [a] | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(s)}{(s)}$ |
| 1 | 1973 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 1.19 | | 0.00303 [b] | 1.17 | 0.0133 | 0.00974 |
| 2 | 1972 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 1.19 | | 0.00303 | 1.74 | 0.0295 | 0.00974 |
| 3 | 1971 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 1.19 | | 0.00303 | 1.31 | 0.0160 | 0.00930 |
| 4 | 1970 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 1.19 | | 0.00303 | 1.23 | 0.0141 | 0.00930 |
| 5 | 1969 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 1.19 | | 0.00303 | 1.06 | 0.00500 | 0.00445 |
| 6 | 1968 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 1.19 | | 0.00303 | 0.962 | 0.00412 | 0.00445 |
| 7 | 1967 | 9.4 | 0.10 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 1.19 | | 0.00303 | 0.694 | 0.00214 | 0.00445 |
| 8 | 1966 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 1.19 | | 0.00303 | 0.582 | 0.00151 | 0.00445 |
| 9 | 1965 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 1.19 | | 0.00303 | 0.414 | 0.000746 | 0.00435 |
| 10 | 1964 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 1.19 | | 0.00303 | 0.313 | 0.000426 | 0.00435 |
| 11 | 1963 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 1.19 | | 0.00303 | 0.201 | 0.000176 | 0.00435 |
| 12 | 1962 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 1.19 | | 0.00303 | 0.179 | 0.000139 | 0.00435 |
| 13 | 1961 & older | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 1.19 | | 0.00303 | 1.210 | 0.000637 | 0.00435 |

$e_i = c_i d_i m_i s_i$ $\qquad e = 11.07$ $\qquad \sum = 11.070 \quad 0.0935$

$Var\ e_i = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$ $\qquad Var(e) = 0.0935 \quad , \quad \frac{\sigma_e}{e} = 0.0276$

$e_m = \sum e_i \,, \quad Var(e_m) = \sum Var(e_i) \,, \quad \sigma_{e_m} = \left[ Var(e_m) \right]^{\frac{1}{2}}$ $\qquad \sigma_e = 0.306$

[a] Speed correction factors same as for light-duty gasoline vehicles. [b] The average precision of HC and CO speed correction factors was used.

## Table F-11 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type ☐ Light-duty gasoline ☒ Heavy-duty gasoline  Road type Rural  Pollutant $NO_x$

Avg speed 45 mph

| Age | Model year | Emission rate, $c_i$ | $Var(c_i)$ | $\frac{Var(c_i)}{(c_i)^2}$ | Deterioration factor, $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | Weighted annual travel, $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | Speed correction factor, $s_i$ [a] | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | Emission factor, $e_i$ | $Var(e_i)$ | $\sum \frac{Var(s)}{(s)^2}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1973 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 1.31 | | 0.00303 [b] | 1.29 | 0.0162 | 0.00974 |
| 2 | 1972 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 1.31 | | 0.00303 | 1.92 | 0.0359 | 0.00974 |
| 3 | 1971 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 1.31 | | 0.00303 | 1.45 | 0.0196 | 0.00930 |
| 4 | 1970 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 1.31 | | 0.00303 | 1.35 | 0.0169 | 0.00930 |
| 5 | 1969 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 1.31 | | 0.00303 | 1.17 | 0.00609 | 0.00445 |
| 6 | 1968 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 1.31 | | 0.00303 | 1.06 | 0.00500 | 0.00445 |
| 7 | 1967 | 9.4 | 0.10 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 1.31 | | 0.00303 | 0.763 | 0.00259 | 0.00445 |
| 8 | 1966 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 1.31 | | 0.00303 | 0.640 | 0.00182 | 0.00445 |
| 9 | 1965 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 1.31 | | 0.00303 | 0.456 | 0.000905 | 0.00435 |
| 10 | 1964 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 1.31 | | 0.00303 | 0.345 | 0.000518 | 0.00435 |
| 11 | 1963 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 1.31 | | 0.00303 | 0.222 | 0.000214 | 0.00435 |
| 12 | 1962 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 1.31 | | 0.00303 | 0.197 | 0.000169 | 0.00435 |
| 13 | 1961 & older | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 1.31 | | 0.00303 | 1.330 | 0.00769 | 0.00435 |
| | | | | | | | | | | | | | $\Sigma =$ | 12.190 | 0.1136 | |

$e_i = c_i d_i m_i s_i$  $e = 12.19$

$Var\ e_i = (e_i)^2 \left[ \frac{Var(c_i)}{(c_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right]$  $Var(e) = 0.1136$, $\frac{\sigma_e}{e} = 0.0276$

$e_m = \Sigma e_i$, $Var(e_m) = \Sigma Var(e_i)$, $\sigma_{e_m} = \left[ Var(e_m) \right]^{1/2}$  $\sigma_e = 0.3370$

[a] Speed correction factors same as for light-duty gasoline vehicles.  [b] The average precision of HC and CO speed correction factors was used.

## Table F-12 CALCULATION OF PRECISION OF EXHAUST EMISSION FACTORS

Vehicle type ☐ Light-duty gasoline ☒ Heavy-duty gasoline  Road type Limited Access  Pollutant $NO_x$

Avg speed 55 mph

| Age | Model year | Emission rate, $e_i$ | | | Deterioration factor, $d_i$ | | | Weighted annual travel, $m_i$ | | | Speed correction factor, $s_i$ [a] | | | Emission factor, $e_i$ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $e_i$ | $Var(e_i)$ | $\frac{Var(e_i)}{(e_i)^2}$ | $d_i$ | $Var(d_i)$ | $\frac{Var(d_i)}{(d_i)^2}$ | $m_i$ | $Var(m_i)$ | $\frac{Var(m_i)}{(m_i)^2}$ | $s_i$ | $Var(s_i)$ | $\frac{Var(s_i)}{(s_i)^2}$ | $e_i$ | $Var(e_i)$ | $\sum \frac{Var(e_i)}{(e_i)^2}$ |
| 1 | 1973 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.107 | $78 \times 10^{-7}$ | 0.00069 | 1.45 | | 0.00303 | 1.43 | 0.0199 | 0.00974 |
| 2 | 1972 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.159 | $174 \times 10^{-7}$ | 0.00069 | 1.45 | | 0.00303 | 2.12 | 0.0938 | 0.00974 |
| 3 | 1971 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.120 | $36 \times 10^{-7}$ | 0.00025 | 1.45 | | 0.00303 | 1.60 | 0.0238 | 0.00930 |
| 4 | 1970 | 9.2 | 0.510 | 0.00602 | 1.00 | 0.0 | 0.0 | 0.112 | $31 \times 10^{-7}$ | 0.00025 | 1.45 | | 0.00303 | 1.49 | 0.0206 | 0.00930 |
| 5 | 1969 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.095 | $15 \times 10^{-7}$ | 0.00017 | 1.45 | | 0.00303 | 1.29 | 0.00741 | 0.00445 |
| 6 | 1968 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.086 | $17 \times 10^{-7}$ | 0.00017 | 1.45 | | 0.00303 | 1.17 | 0.00609 | 0.00445 |
| 7 | 1967 | 9.4 | 0.10 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.062 | $6 \times 10^{-7}$ | 0.00017 | 1.45 | | 0.00303 | 0.845 | 0.00318 | 0.00445 |
| 8 | 1966 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.052 | $4 \times 10^{-7}$ | 0.00017 | 1.45 | | 0.00303 | 0.709 | 0.00224 | 0.00445 |
| 9 | 1965 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.037 | $1 \times 10^{-7}$ | 0.00007 | 1.45 | | 0.00303 | 0.504 | 0.00110 | 0.00435 |
| 10 | 1964 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.028 | $0.5 \times 10^{-7}$ | 0.00007 | 1.45 | | 0.00303 | 0.382 | 0.000635 | 0.00435 |
| 11 | 1963 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.018 | $0.2 \times 10^{-7}$ | 0.00007 | 1.45 | | 0.00303 | 0.245 | 0.000261 | 0.00435 |
| 12 | 1962 | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.016 | $0.2 \times 10^{-7}$ | 0.00007 | 1.45 | | 0.00303 | 0.218 | 0.000207 | 0.00435 |
| 13 | 1961 & older | 9.4 | 0.110 | 0.00125 | 1.00 | 0.0 | 0.0 | 0.108 | $8 \times 10^{-7}$ | 0.00007 | 1.45 | | 0.00303 | 1.470 | 0.000940 | 0.00435 |
| | | | | | | | | | | | | | | $\Sigma =$ 13.470 | 0.13860 | |

$e_i = e_i, d_i, m_i, s_i$

$e = 13.47$

$Var(e_i) = \left\{ \frac{Var(e_i)}{(e_i)^2} + \frac{Var(d_i)}{(d_i)^2} + \frac{Var(m_i)}{(m_i)^2} + \frac{Var(s_i)}{(s_i)^2} \right\}$

$Var(e) = 0.1386$, $\frac{\sigma_e}{e} = 0.0276$

$e_m = \sum e_i$, $Var(e_m) = \sum Var(e_i)$, $\sigma_{e_m} = \left[Var(e_m)\right]^{\frac{1}{2}}$

$\sigma_e = 0.3723$

[a] Speed correction factors same as for light-duty gasoline vehicles. [b] The average precision of HC and CO speed correction factors was used.

**Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.21' | 0.211 | 0.211 |
| 06 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 01 002 01 | 0.196 | -- | 0.029 | 0.549 | 0.029 |
| 02 | 0.196 | -- | 0.049 | 0.549 | 0.049 |
| 03 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| 04 | 0.196 | -- | 0.132 | 0.549 | 0.132 |
| 05 | 0.196 | -- | -- | 0.549 | 0.549 |
| 06 | 0.196 | -- | 0.029 | 0.549 | 0.029 |
| 07 | 0.196 | -- | 0.049 | 0.549 | 0.049 |
| 08 | 0.196 | -- | 0.132 | 0.549 | 0.132 |
| 09 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| 10 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 11 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| 12 | 0.196 | -- | 0.049 | 0.549 | 0.049 |
| 99 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| 1 01 003 01 | 0.196 | -- | -- | 0.549 | 0.549 |
| 02 | 0.196 | -- | -- | 0.549 | 0.549 |
| 03 | 0.196 | -- | -- | 0.549 | 0.549 |

**Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 003 04 | 0.196 | -- | -- | 0.549 | 0.549 |
| 05 | 0.196 | -- | -- | 0.549 | 0.549 |
| 06 | 0.196 | -- | -- | 0.549 | 0.549 |
| 07 | 0.196 | -- | -- | 0.549 | 0.549 |
| 08 | 0.196 | -- | -- | 0.549 | 0.549 |
| 09 | 0.196 | -- | -- | 0.549 | 0.549 |
| 10 | 0.196 | -- | -- | 0.549 | 0.549 |
| 11 | 0.196 | -- | -- | 0.549 | 0.549 |
| 12 | 0.196 | -- | -- | 0.549 | 0.549 |
| 13 | 0.196 | -- | -- | 0.549 | 0.549 |
| 14 | 0.196 | -- | -- | 0.549 | 0.549 |
| 15 | 0.196 | -- | -- | 0.549 | 0.549 |
| 1 01 004 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 01 005 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 01 006 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 01 007 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 02 | 0.196 | -- | -- | 0.211 | 0.211 |

**Table G-1** PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 007 03 | 0.196 | -- | -- | 0.211 | 0.211 |
| 1 01 008 01 | 0.196 | -- | -- | 0.549 | 0.549 |
| 1 01 011 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 01 012 01 | 0.196 | -- | -- | 0.549 | 0.549 |
| 02 | 0.196 | -- | -- | 0.549 | 0.549 |
| 03 | 0.196 | -- | -- | 0.549 | 0.549 |
| 1 01 999 97 | 0.196 | -- | -- | 0.549 | 0.549 |
| 98 | 0.196 | -- | -- | 0.549 | 0.549 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 1 02 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 06 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 07 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 02 002 01 | 0.196 | -- | 0.029 | 0.211 | 0.029 |
| 02 | 0.196 | -- | 0.049 | 0.211 | 0.049 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.132 | 0.211 | 0.132 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 002 06 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 07 | 0.196 | -- | 0.029 | 0.211 | 0.029 |
| 08 | 0.196 | -- | 0.049 | 0.211 | 0.049 |
| 09 | 0.196 | -- | 0.132 | 0.211 | 0.132 |
| 10 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 11 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 12 | 0.196 | -- | 0.049 | 0.211 | 0.049 |
| 13 | 0.196 | -- | 0.132 | 0.211 | 0.132 |
| 14 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 02 003 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 02 | 0.196 | -- | -- | 0.211 | 0.211 |
| 03 | 0.196 | -- | -- | 0.211 | 0.211 |
| 04 | 0.196 | -- | -- | 0.211 | 0.211 |
| 05 | 0.196 | -- | -- | 0.211 | 0.211 |
| 06 | 0.196 | -- | -- | 0.211 | 0.211 |
| 07 | 0.196 | -- | -- | 0.211 | 0.211 |
| 08 | 0.196 | -- | -- | 0.211 | 0.211 |
| 09 | 0.196 | -- | -- | 0.211 | 0.211 |
| 10 | 0.196 | -- | -- | 0.211 | 0.211 |
| 11 | 0.196 | -- | -- | 0.211 | 0.211 |
| 12 | 0.196 | -- | -- | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 003 13 | 0.196 | -- | -- | 0.211 | 0.211 |
| 14 | 0.196 | -- | -- | 0.211 | 0.211 |
| 15 | 0.196 | -- | -- | 0.211 | 0.211 |
| 16 | 0.196 | -- | -- | 0.211 | 0.211 |
| 1 02 004 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 02 005 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 02 006 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 02 007 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 02 | 0.196 | -- | -- | 0.211 | 0.211 |
| 03 | 0.196 | -- | -- | 0.211 | 0.211 |
| 1 02 008 02 | 0.196 | -- | -- | 0.211 | 0.211 |
| 03 | 0.196 | -- | -- | 0.211 | 0.211 |
| 1 02 009 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 02 010 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 | 02 | 011 | 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 | 02 | 999 | 97 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 98 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 1 | 03 | 001 | 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 06 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 07 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 08 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 09 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 10 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 99 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 | 03 | 002 | 05 | 0.196 | -- | 0.029 | 0.549 | 0.029 |
| | | | 06 | 0.196 | -- | 0.049 | 0.549 | 0.049 |
| | | | 07 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| | | | 08 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| | | | 09 | 0.196 | -- | 0.132 | 0.549 | 0.132 |
| | | | 10 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| | | | 11 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| | | | 12 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| | | | 13 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| | | | 14 | 0.196 | -- | 0.211 | 0.549 | 0.211 |

**Table G-1** PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 03 002 99 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| 1 03 003 05 | 0.196 | -- | -- | 0.549 | 0.549 |
| 06 | 0.196 | -- | -- | 0.549 | 0.549 |
| 07 | 0.196 | -- | -- | 0.549 | 0.549 |
| 08 | 0.196 | -- | -- | 0.549 | 0.549 |
| 09 | 0.196 | -- | -- | 0.549 | 0.549 |
| 10 | 0.196 | -- | -- | 0.549 | 0.549 |
| 11 | 0.196 | -- | -- | 0.549 | 0.549 |
| 12 | 0.196 | -- | -- | 0.549 | 0.549 |
| 13 | 0.196 | -- | -- | 0.549 | 0.549 |
| 14 | 0.196 | -- | -- | 0.549 | 0.549 |
| 1 03 004 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 03 005 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 03 006 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 03 009 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 03 010 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 03 010 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 1 03 999 97 | 0.196 | -- | -- | 0.549 | 0.549 |
| 98 | 0.196 | -- | -- | 0.549 | 0.549 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 2 01 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 2 01 002 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 2 01 003 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 2 01 999 97 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 98 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 2 02 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 2 02 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 2 02 003 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 2 02 004 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 2 02 999 97 | -- | -- | -- | -- | -- |
| 98 | 0.196 | -- | -- | 0.211 | 0.211 |
| 2 03 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 2 03 999 97 | 0.196 | -- | -- | 0.211 | 0.211 |
| 98 | 0.196 | -- | -- | 0.211 | 0.211 |
| 2 04 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 01 001 01 | -- | -- | -- | -- | -- |

**Table G-1** PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 001 99 | -- | -- | -- | -- | -- |
| 3 01 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 003 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 004 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 005 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | -- | -- | -- | -- | -- |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 006 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 01 007 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 008 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 009 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 10 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 011 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 012 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | -- | -- | -- | -- | -- |
| 3 01 013 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

**Table G-1** PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 013 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 014 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 015 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 016 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 017 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 017 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 018 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 019 03 | -- | -- | -- | -- | -- |
| 3 01 020 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | -- | -- | -- | -- | -- |
| 3 01 021 01 | -- | -- | -- | -- | -- |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | -- | -- | -- | -- | -- |
| 3 01 022 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 023 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 06 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 08 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 10 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 12 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 14 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

**Table G-1** PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 | 01 | 023 | 16 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 18 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 | 01 | 024 | 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 03 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 04 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 05 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 06 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 08 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 10 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 12 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 14 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 | 01 | 025 | 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 05 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 10 | -- | -- | -- | -- | -- |
| | | | 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 | 01 | 026 | 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 02 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 03 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 04 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 05 | 0.196 | -- | -- | 0.211 | 0.211 |

**Table G-1** PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 026 06 | 0.196 | -- | -- | 0.211 | 0.211 |
| 07 | 0.196 | -- | -- | 0.211 | 0.211 |
| 08 | 0.196 | -- | -- | 0.211 | 0.211 |
| 09 | 0.196 | -- | -- | 0.211 | 0.211 |
| 20 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 027 01 | -- | -- | -- | -- | -- |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | -- | -- | -- | -- | -- |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 06 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 01 028 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | -- | -- | -- | -- | -- |
| 3 01 029 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 030 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 031 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 032 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

**Table G-1** PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 032 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 033 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 034 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 035 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 036 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 02 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 037 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 02 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 038 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 039 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 040 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 050 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 090 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 091 01 | -- | -- | -- | -- | -- |
| 3 01 100 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 101 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 01 110 01 | -- | -- | -- | -- | -- |
| 3 01 900 99 | -- | -- | -- | -- | -- |
| 3 01 999 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

**Table G-1** PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 001 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 002 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 003 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 02 004 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 02 005 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 02 006 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 007 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

**Table G-1** PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 007 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 06 | -- | -- | -- | -- | -- |
| 30 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 008 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 009 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 010 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | -- | -- | -- | -- | -- |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 011 01 | -- | -- | -- | -- | -- |
| 3 02 012 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 013 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 02 014 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 02 015 01 | 0.196 | -- | -- | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 015 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 016 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 017 20 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 018 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 030 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 02 999 98 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 03 000 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 03 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 03 002 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 03 003 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 003 06 | -- | -- | -- | -- | -- |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 03 004 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 03 005 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 06 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 03 006 01 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| 03 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 04 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| 10 | 0.196 | -- | -- | 0.549 | 0.549 |
| 11 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 03 007 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | -- | -- | -- | -- | -- |
| 3 03 008 01 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| 02 | 0.196 | -- | 0.549 | 0.549 | 0.549 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 | 03 | 008 | 03 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| | | | 04 | 0.196 | -- | -- | 0.549 | 0.549 |
| | | | 05 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| | | | 06 | 0.196 | 0.200 | -- | 0.549 | 0.549 |
| | | | 07 | -- | -- | -- | -- | -- |
| | | | 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 | 03 | 009 | 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 | 03 | 010 | 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 | 03 | 011 | 01 | 0.196 | -- | -- | 0.549 | 0.549 |
| | | | 02 | 0.196 | -- | -- | 0.549 | 0.549 |
| | | | 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 | 03 | 012 | 01 | 0.196 | -- | -- | 0.549 | 0.549 |
| | | | 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 | 03 | 013 | 01 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 | 03 | 014 | 01 | 0.196 | -- | -- | 0.549 | 0.549 |

**Table G-1** PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 014 02 | 0.196 | -- | -- | 0.549 | 0.549 |
| 03 | 0.196 | -- | -- | 0.549 | 0.549 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 03 030 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 06 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 03 999 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 04 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 10 | 0.196 | -- | -- | 0.211 | 0.211 |
| 11 | 0.196 | -- | -- | 0.211 | 0.211 |
| 20 | 0.196 | -- | -- | 0.211 | 0.211 |
| 50 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 002 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

**Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 002 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 06 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 3 04 002 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 003 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | -- | 0.211 | 0.211 |
| 30 | 0.196 | -- | -- | 0.211 | 0.211 |
| 40 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 004 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 08 | -- | -- | -- | -- | -- |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 005 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 006 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 007 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 007 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | -- | -- | -- | -- | -- |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 008 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 06 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 07 | -- | -- | -- | -- | -- |
| 08 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 009 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 010 01 | -- | -- | -- | -- | -- |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 011 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 020 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 02 | 0.196 | -- | -- | 0.211 | 0.211 |
| 03 | 0.196 | -- | -- | 0.211 | 0.211 |
| 04 | -- | -- | -- | -- | -- |

**Table G-1** PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 020 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 050 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 04 999 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 05 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 05 002 01 | 0.196 | -- | 0.123 | 0.123 | 0.123 |
| 02 | 0.196 | -- | 0.123 | 0.123 | 0.123 |
| 99 | 0.196 | -- | -- | 0.123 | 0.123 |
| 3 05 003 01 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 02 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 03 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 04 | 0.196 | -- | 0.230 | 0.549 | 0.230 |
| 05 | 0.196 | -- | 0.204 | 0.549 | 0.204 |
| 06 | 0.196 | -- | 0.255 | 0.549 | 0.255 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 05 004 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 05 005 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 005 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 05 006 01 | 0.196 | -- | 0.206 | 0.549 | 0.206 |
| 02 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 03 | 0.196 | -- | 0.207 | 0.549 | 0.207 |
| 04 | 0.196 | -- | 0.207 | 0.549 | 0.207 |
| 05 | 0.196 | -- | 0.207 | 0.549 | 0.207 |
| 99 | 0.196 | -- | 0.211 | 0.549 | 0.211 |
| 3 05 007 01 | 0.196 | -- | 0.236 | 0.549 | 0.236 |
| 02 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 03 | 0.196 | -- | 0.236 | 0.549 | 0.236 |
| 04 | 0.196 | -- | 0.236 | 0.549 | 0.236 |
| 05 | 0.196 | -- | 0.236 | 0.549 | 0.236 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 05 008 01 | 0.196 | -- | 0.0180 | 0.549 | 0.018 |
| 02 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 03 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 05 009 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 009 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 05 010 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 05 011 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 20 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 05 012 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 05 013 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | -- | -- | -- | -- | -- |
| 3 05 014 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 10 | 0.196 | -- | -- | 0.211 | 0.211 |
| 11 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 015 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 015 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 05 016 01 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 02 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 03 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 04 | 0.196 | -- | 0.263 | 0.549 | 0.263 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 05 017 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | -- | -- | -- | -- | -- |
| 3 05 018 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | -- | -- | -- | -- | -- |
| 3 05 019 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 05 020 01 | 0.196 | -- | 0.549 | 0.549 | 0.549 |

**Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 020 02 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 03 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 04 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 05 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 06 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 07 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 08 | 0.196 | -- | -- | 0.549 | 0.549 |
| 09 | 0.196 | -- | -- | 0.549 | 0.549 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 05 021 01 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 05 022 01 | 0.196 | -- | -- | 0.549 | 0.549 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 05 023 01 | 0.196 | -- | -- | 0.549 | 0.549 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 05 024 01 | 0.196 | -- | -- | 0.549 | 0.549 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 05 025 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 05 026 01 | 0.196 | -- | -- | 0.549 | 0.549 |
| 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 05 030 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 05 999 99 | 0.196 | -- | -- | 0.549 | 0.549 |
| 3 06 001 01 | 0.196 | -- | 0.549 | 0.549 | 0.549 |

**Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 06 001 02 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 03 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 04 | 0.196 | -- | 0.549 | 0.549 | 0.549 |
| 3 06 002 01 | 0.196 | 0.785 | 0.785 | 0.785 | 0.785 |
| 3 06 003 01 | 0.196 | 0.211 | 0.211 | 0.211 | 0.211 |
| 3 06 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 007 01 | -- | -- | -- | -- | -- |
| 3 06 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 3 06 009 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 06 010 01 | -- | -- | -- | -- | -- |
| 3 06 011 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 06 012 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 | 06 | 999 | 98 | 0.196 | -- | -- | 0.785 | 0.785 |
| | | | 99 | 0.196 | -- | -- | 0.785 | 0.785 |
| 3 | 07 | 001 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 06 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 07 | -- | -- | -- | -- | -- |
| | | | 08 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 09 | -- | -- | -- | -- | -- |
| | | | 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 | 07 | 002 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 04 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 06 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 | 07 | 004 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 | 07 | 005 | 01 | -- | -- | -- | -- | -- |

**Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 07 005 99 | -- | -- | -- | -- | -- |
| 3 07 006 01 | -- | -- | -- | -- | -- |
| 3 07 007 01 | -- | -- | -- | -- | -- |
| 02 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | -- | -- | -- | -- | -- |
| 3 07 008 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 07 009 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 07 010 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 07 020 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 07 999 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 09 001 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 02 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 09 010 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 09 020 99 | -- | -- | -- | -- | -- |
| 3 09 999 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 20 999 99 | -- | -- | -- | -- | -- |
| 3 30 001 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 30 002 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 30 003 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 3 90 001 99 | -- | -- | -- | 0.549 | -- |
| 3 90 002 01 | -- | -- | -- | 0.549 | -- |

**Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 90 002 06 | -- | -- | -- | 0.549 | -- |
| 07 | -- | -- | -- | 0.549 | -- |
| 08 | -- | -- | -- | 0.549 | -- |
| 99 | -- | -- | -- | 0.549 | -- |
| 3 90 004 01 | -- | -- | -- | 0.549 | -- |
| 02 | -- | -- | -- | 0.549 | -- |
| 03 | -- | -- | -- | 0.549 | -- |
| 04 | -- | -- | -- | 0.549 | -- |
| 05 | -- | -- | -- | 0.549 | -- |
| 06 | -- | -- | -- | 0.549 | -- |
| 07 | -- | -- | -- | 0.549 | -- |
| 99 | -- | -- | -- | 0.549 | -- |
| 3 90 005 01 | -- | -- | -- | 0.549 | -- |
| 02 | -- | -- | -- | 0.549 | -- |
| 03 | -- | -- | -- | 0.549 | -- |
| 04 | -- | -- | -- | 0.549 | -- |
| 05 | -- | -- | -- | 0.549 | -- |
| 06 | -- | -- | -- | 0.549 | -- |
| 07 | -- | -- | -- | 0.549 | -- |
| 99 | -- | -- | -- | 0.549 | -- |
| 3 90 006 01 | -- | -- | -- | 0.549 | -- |
| 02 | -- | -- | -- | 0.549 | -- |
| 03 | -- | -- | -- | 0.549 | -- |

**Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 90 006 04 | -- | -- | -- | 0.549 | -- |
| 05 | -- | -- | -- | 0.549 | -- |
| 06 | -- | -- | -- | 0.549 | -- |
| 07 | -- | -- | -- | 0.549 | -- |
| 99 | -- | -- | -- | 0.549 | -- |
| 3 90 007 99 | -- | -- | -- | 0.549 | -- |
| 3 90 008 99 | -- | -- | -- | 0.549 | -- |
| 3 90 009 99 | -- | -- | -- | 0.549 | -- |
| 3 90 999 97 | -- | -- | -- | 0.549 | -- |
| 98 | -- | -- | -- | 0.549 | -- |
| 99 | -- | -- | -- | 0.549 | -- |
| 3 99 999 99 | -- | -- | -- | -- | -- |
| 4 01 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 4 01 002 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 4 01 999 99 | 0.196 | -- | -- | 0.211 | 0.211 |
| 4 02 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 4 02 003 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 4 02 004 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 4 02 005 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 4 02 006 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 4 02 999 99 | 0.196 | -- | -- | 0.211 | 0.211 |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 4 03 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 4 03 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 4 03 999 99 | -- | -- | -- | -- | -- |
| 4 04 001 99 | -- | -- | -- | -- | -- |
| 4 05 001 01 | -- | -- | -- | -- | -- |
| 4 90 999 99 | -- | -- | -- | -- | -- |
| 5 01 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 5 01 002 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | -- | 0.211 | 0.211 |
| 5 01 005 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 06 | 0.196 | -- | -- | 0.211 | 0.211 |
| 07 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 99 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 5 01 900 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |

**Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 5 01 900 06 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 97 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 5 02 001 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 5 02 002 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 5 02 003 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 5 02 005 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 06 | 0.196 | -- | -- | 0.211 | 0.211 |
| 99 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 5 02 900 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 97 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |

Table G-1 PRECISION OF UNIT EMISSION FACTORS FOR PARTICULATE MATTER

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 5 | 03 | 001 | 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 04 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 05 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 06 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 5 | 03 | 002 | 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 03 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 5 | 03 | 003 | 01 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| | | | 02 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 5 | 03 | 004 | 01 | 0.196 | -- | -- | 0.211 | 0.211 |
| 5 | 03 | 005 | 06 | 0.196 | -- | -- | 0.211 | 0.211 |
| | | | 99 | 0.196 | -- | 0.211 | 0.211 | 0.211 |
| 5 | 03 | 900 | 04 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 06 | -- | -- | -- | -- | -- |
| | | | 07 | -- | -- | -- | -- | -- |
| | | | 10 | -- | -- | -- | -- | -- |
| | | | 97 | -- | -- | -- | -- | -- |
| | | | 98 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS FOR $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 001 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 04 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 05 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 06 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 99 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 01 002 01 | 0.177 | 0.118 | 0.118 | 0.254 | 0.118 |
| 02 | 0.177 | 0.105 | 0.105 | 0.254 | 0.105 |
| 03 | 0.177 | 0.045 | 0.045 | 0.254 | 0.045 |
| 04 | 0.177 | 0.254 | 0.254 | 0.254 | 0.254 |
| 05 | 0.177 | 0.254 | -- | 0.254 | 0.254 |
| 06 | 0.177 | 0.118 | 0.118 | 0.254 | 0.118 |
| 07 | 0.177 | 0.105 | 0.105 | 0.254 | 0.105 |
| 08 | 0.177 | 0.254 | 0.254 | 0.254 | 0.254 |
| 09 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 10 | 0.177 | 0.254 | 0.254 | 0.254 | 0.254 |
| 11 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 12 | 0.177 | 0.105 | 0.105 | 0.254 | 0.105 |
| 99 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 1 01 003 01 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 02 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 03 | 0.177 | 0.102 | -- | 0.254 | 0.254 |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 003 04 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 05 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 06 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 07 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 08 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 09 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 10 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 11 | 0.107 | 0.102 | -- | 0.254 | 0.254 |
| 12 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 13 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 14 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 15 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 1 01 004 01 | 0.177 | 0.027 | 0.027 | 0.027 | 0.027 |
| 02 | 0.177 | 0.027 | 0.027 | 0.027 | 0.027 |
| 03 | 0.177 | 0.027 | 0.027 | 0.027 | 0.027 |
| 1 01 005 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 01 006 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 01 007 01 | 0.177 | 0.051 | -- | 0.146 | 0.146 |
| 02 | 0.177 | 0.051 | -- | 0.146 | 0.146 |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 007 03 | 0.177 | 0.051 | -- | 0.146 | 0.146 |
| 1 01 008 01 | 0.177 | 0.041 | -- | 0.254 | 0.254 |
| 1 01 011 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 1 01 012 01 | 0.177 | 0.118 | -- | 0.254 | 0.254 |
| 02 | 0.177 | 0.118 | -- | 0.254 | 0.254 |
| 03 | 0.177 | 0.118 | -- | 0.254 | 0.254 |
| 1 01 999 97 | 0.177 | 0.254 | -- | 0.254 | 0.254 |
| 98 | 0.177 | 0.254 | -- | 0.254 | 0.254 |
| 99 | 0.177 | 0.254 | -- | 0.254 | 0.254 |
| 1 02 001 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 04 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 05 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 06 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 07 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 99 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 02 002 01 | 0.177 | 0.188 | 0.188 | 0.254 | 0.188 |
| 02 | 0.177 | 0.105 | 0.105 | 0.254 | 0.105 |
| 03 | 0.177 | 0.045 | 0.045 | 0.254 | 0.045 |
| 04 | 0.177 | 0.254 | 0.254 | 0.254 | 0.254 |
| 05 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |

**TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 002 06 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 07 | 0.177 | 0.188 | 0.188 | 0.254 | 0.188 |
| 08 | 0.177 | 0.105 | 0.105 | 0.254 | 0.105 |
| 09 | 0.177 | 0.254 | 0.254 | 0.254 | 0.254 |
| 10 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 11 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 12 | 0.177 | 0.105 | 0.105 | 0.254 | 0.105 |
| 13 | 0.177 | 0.254 | 0.254 | 0.254 | 0.254 |
| 14 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 99 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 1 02 003 01 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 02 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 03 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 04 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 05 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 06 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 07 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 08 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 09 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 10 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 11 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 12 | 0.177 | 0.102 | -- | 0.254 | 0.254 |

TABLE G-2 PRECISION OF UN'T EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 003 13 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 14 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 15 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 16 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 1 02 004 01 | 0.177 | 0.027 | 0.027 | 0.027 | 0.027 |
| 02 | 0.177 | 0.027 | 0.027 | 0.027 | 0.027 |
| 03 | 0.177 | 0.027 | 0.027 | 0.027 | 0.027 |
| 1 02 005 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 02 006 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 02 007 01 | 0.177 | 0.051 | -- | 0.146 | 0.146 |
| 02 | 0.177 | 0.051 | -- | 0.146 | 0.146 |
| 03 | 0.177 | 0.051 | -- | 0.146 | 0.146 |
| 1 02 008 02 | 0.177 | 0.041 | -- | 0.254 | 0.254 |
| 03 | 0.177 | 0.041 | -- | 0.254 | 0.254 |
| 1 02 009 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 02 010 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 011 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 1 02 999 97 | 0.177 | 0.254 | -- | 0.254 | 0.254 |
| 98 | 0.177 | 0.254 | -- | 0.254 | 0.254 |
| 99 | 0.177 | 0.254 | -- | 0.254 | 0.254 |
| 1 03 001 05 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 06 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 07 | 0.177 | 0.146 | -- | 0.146 | 0.146 |
| 08 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 09 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 10 | 0.177 | 0.146 | -- | 0.146 | 0.146 |
| 99 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 03 002 05 | 0.177 | 0.188 | 0.188 | 0.254 | 0.188 |
| 06 | 0.177 | 0.105 | 0.105 | 0.254 | 0.105 |
| 07 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 08 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 09 | 0.177 | 0.254 | 0.254 | 0.254 | 0.254 |
| 10 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 11 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 12 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 13 | 0.177 | 0.254 | 0.254 | 0.254 | 0.254 |
| 14 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 03 002 99 | 0.177 | 0.146 | 0.146 | 0.254 | 0.146 |
| 1 03 003 05 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 06 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 07 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 08 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 09 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 10 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 11 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 12 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 13 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 14 | 0.177 | 0.102 | -- | 0.254 | 0.254 |
| 1 03 004 01 | 0.177 | 0.027 | 0.027 | 0.027 | 0.027 |
| 02 | 0.177 | 0.027 | 0.027 | 0.027 | 0.027 |
| 03 | 0.177 | 0.027 | 0.027 | 0.027 | 0.027 |
| 1 03 005 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 03 006 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 03 009 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 03 010 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |

TABLE G-2 PRECISION OF UN'T EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 03 010 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 1 03 999 97 | 0.177 | 0.254 | -- | 0.254 | 0.254 |
| 98 | 0.177 | 0.254 | -- | 0.254 | 0.254 |
| 99 | 0.177 | 0.254 | -- | 0.254 | 0.254 |
| 2 01 001 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 2 01 002 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 2 01 003 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 2 01 999 97 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 98 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 2 02 001 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 2 02 002 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 2 02 003 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 2 02 004 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 2 02 999 97 | 0.177 | 0.146 | -- | 0.146 | 0.146 |
| 98 | 0.177 | 0.146 | -- | 0.146 | 0.146 |
| 2 03 001 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 2 03 999 97 | 0.177 | 0.146 | -- | 0.146 | 0.146 |
| 98 | 0.177 | 0.146 | -- | 0.146 | 0.146 |
| 2 04 001 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 3 01 001 01 | -- | -- | -- | -- | -- |

**TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 001 99 | -- | -- | -- | -- | -- |
| 3 01 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 003 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 004 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 006 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 007 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 008 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 009 01 | -- | -- | -- | -- | -- |
| 10 | 0.177 | -- | -- | 0.146 | 0.146 |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 01 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 04 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 05 | 0.177 | -- | -- | 0.146 | 0.146 |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 01 011 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 012 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 013 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 013 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 014 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 015 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 016 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 017 01 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 017 99 | -- | --- | -- | -- | -- |
| 3 01 018 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 019 03 | -- | -- | -- | -- | -- |
| 3 01 020 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 021 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 022 01 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 01 023 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 04 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 06 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 08 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 10 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 12 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 14 | 0.177 | -- | 0.146 | 0.146 | 0.146 |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 023 16 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 18 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 01 024 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 14 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 025 01 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 026 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 026 06 | -- | -- | -- | --- | -- |
| 07 | -- | -- | -- | -- | |
| 08 | -- | -- | -- | -- | -- |
| 09 | -- | -- | -- | -- | -- |
| 20 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 027 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 3 01 028 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 029 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 030 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 031 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 032 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | -- | 0.146 | 0.146 | 0.146 |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 032 03 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 01 033 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 034 01 | -- | -- | -- | -- | -- |
| 3 01 035 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 036 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 037 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 038 01 | -- | -- | -- | -- | -- |
| 3 01 039 01 | -- | -- | -- | -- | -- |
| 3 01 040 01 | -- | -- | -- | -- | -- |
| 3 01 050 01 | -- | -- | -- | -- | -- |
| 3 01 090 99 | -- | -- | -- | -- | -- |
| 3 01 091 01 | -- | -- | -- | -- | -- |
| 3 01 100 01 | -- | -- | -- | -- | -- |
| 3 01 101 01 | -- | -- | -- | -- | -- |
| 3 01 110 01 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 01 900 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 01 999 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 02 001 01 | -- | -- | -- | -- | -- |

**TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 001 99 | -- | -- | -- | -- | -- |
| 3 02 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 003 01 | -- | -- | -- | -- | -- |
| 3 02 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 005 01 | -- | -- | -- | -- | |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 3 02 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |

**TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 007 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 30 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 008 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 009 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 011 01 | -- | -- | -- | -- | -- |
| 3 02 012 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 013 01 | -- | -- | -- | -- | -- |
| 3 02 014 01 | -- | -- | -- | -- | -- |
| 3 02 015 01 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 015 99 | -- | -- | -- | -- | -- |
| 3 02 016 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 017 20 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 018 99 | -- | -- | -- | -- | -- |
| 3 02 030 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 999 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 000 01 | -- | -- | -- | -- | -- |
| 3 03 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 002 01 | -- | -- | -- | -- | -- |
| 3 03 003 01 | 0.177 | -- | -- | 0.146 | 0.146 |
| 02 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 003 06 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 03 004 01 | -- | -- | -- | -- | -- |
| 3 03 005 01 | 0.177 | -- | 0.146 | 0.220 | 0.146 |
| 02 | 0.177 | -- | 0.220 | 0.220 | 0.220 |
| 03 | 0.177 | -- | 0.209 | 0.220 | 0.209 |
| 04 | 0.177 | -- | 0.086 | 0.220 | 0.086 |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 99 | 0.177 | -- | -- | 0.220 | 0.220 |
| 3 03 006 01 | -- | -- | -- | -- | --- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 11 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 03 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 008 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 009 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 010 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | -- | -- | 0.146 | 0.146 |
| 03 | 0.177 | -- | -- | 0.146 | 0.146 |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 03 011 01 | -- | -- | -- | -- | |
| 02 | -- | -- | -- | -- | -- |
| 99 | 0.177 | -- | -- | 0.220 | |
| 3 03 012 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 013 01 | 0.177 | -- | -- | 0.220 | -- |
| 3 03 014 01 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 014 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 030 01 | 0.177 | -- | -- | 0.146 | 0.146 |
| 02 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 999 99 | 0.177 | -- | -- | 0.220 | 0.220 |
| 3 04 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 11 | -- | -- | -- | -- | -- |
| 20 | -- | -- | -- | -- | -- |
| 50 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 002 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 3 04 002 99 | -- | -- | -- | -- | -- |
| 3 04 003 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 30 | -- | -- | -- | -- | -- |
| 40 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 004 01 | -- | -- | -- | --- | -- |
| 02 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 04 | -- | -- | -- | -- | -- |
| 08 | 0.177 | -- | -- | 0.146 | 0.146 |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 04 005 01 | 0.177 | -- | -- | 0.146 | 0.146 |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 04 006 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 007 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 009 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 010 01 | 0.177 | -- | -- | 0.146 | 0.146 |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 04 011 01 | -- | -- | -- | -- | -- |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 04 020 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 020 99 | -- | -- | -- | -- | -- |
| 3 04 050 01 | -- | -- | -- | -- | -- |
| 3 04 999 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 05 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 003 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 05 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 06 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 99 | -- | -- | -- | -- | -- |
| 3 05 004 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 03 | -- | -- | -- | -- | -- |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 05 005 01 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 005 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 006 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 02 | -- | -- | -- | -- | -- |
| 03 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 04 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 05 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 99 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 3 05 007 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 02 | -- | -- | -- | -- | -- |
| 03 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 04 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 05 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 05 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 009 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 009 03 | --- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 011 01 | -- | -- | -- | -- | -- |
| 20 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 012 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 013 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 014 01 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 11 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 015 01 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 015 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 016 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 017 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 018 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 019 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 020 01 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 020 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 09 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 021 01 | -- | -- | -- | -- | -- |
| 3 05 022 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 023 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 024 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 025 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 026 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 030 99 | -- | -- | -- | -- | -- |
| 3 05 999 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 06 001 01 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |

**TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 06 001 02 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 04 | 0.177 | 0.146 | 0.146 | 0.146 | 0.146 |
| 3 06 002 01 | 0.177 | -- | 0.361 | 0.361 | 0.361 |
| 3 06 003 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 3 06 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 007 01 | -- | -- | -- | -- | -- |
| 3 06 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 3 06 009 01 | 0.177 | 0.361 | -- | 0.361 | 0.361 |
| 99 | 0.177 | 0.361 | -- | 0.361 | 0.361 |
| 3 06 010 01 | -- | -- | -- | -- | -- |
| 3 06 011 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 06 012 01 | 0.177 | -- | -- | 0.361 | 0.361 |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 06 999 98 | 0.177 | -- | -- | 0.361 | 0.361 |
| 99 | 0.177 | -- | -- | 0.361 | 0.361 |
| 3 07 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 09 | -- | -- | -- | -- | -- |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 07 002 01 | -- | -- | -- | -- | -- |
| 02 | 0.177 | -- | -- | 0.146 | 0.146 |
| 03 | -- | -- | -- | -- | -- |
| 04 | 0.177 | -- | -- | 0.146 | 0.146 |
| 05 | -- | -- | -- | -- | -- |
| 06 | 0.177 | -- | -- | 0.146 | 0.146 |
| 99 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 07 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 005 01 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 07 005 99 | -- | -- | -- | -- | -- |
| 3 07 006 01 | 0.177 | -- | -- | 0.146 | 0.146 |
| 3 07 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 008 99 | -- | -- | -- | -- | -- |
| 3 07 009 99 | -- | -- | -- | -- | -- |
| 3 07 010 99 | -- | -- | -- | -- | -- |
| 3 07 020 99 | -- | -- | -- | -- | -- |
| 3 07 999 99 | -- | -- | -- | -- | -- |
| 3 09 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 09 010 99 | -- | -- | -- | -- | -- |
| 3 09 020 99 | -- | -- | -- | -- | -- |
| 3 09 999 99 | -- | -- | -- | -- | -- |
| 3 20 999 99 | -- | -- | -- | -- | -- |
| 3 30 001 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 30 002 99 | -- | -- | -- | -- | -- |
| 3 30 003 99 | 0.177 | -- | -- | 0.361 | 0.361 |
| 3 90 001 99 | -- | -- | -- | 0.254 | -- |
| 3 90 002 01 | -- | -- | -- | 0.254 | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 90 002 06 | -- | -- | -- | 0.254 | -- |
| 07 | -- | -- | -- | 0.254 | -- |
| 08 | -- | -- | -- | 0.254 | -- |
| 99 | -- | -- | -- | 0.254 | -- |
| 3 90 004 01 | -- | -- | -- | 0.254 | -- |
| 02 | -- | -- | -- | 0.254 | -- |
| 03 | -- | -- | -- | 0.254 | -- |
| 04 | -- | -- | -- | 0.254 | -- |
| 05 | -- | -- | -- | 0.254 | -- |
| 06 | -- | -- | -- | 0.254 | -- |
| 07 | -- | -- | -- | 0.254 | -- |
| 99 | -- | -- | -- | 0.254 | -- |
| 3 90 005 01 | -- | -- | -- | 0.254 | -- |
| 02 | -- | -- | -- | 0.254 | -- |
| 03 | -- | -- | -- | 0.254 | -- |
| 04 | -- | -- | -- | 0.254 | -- |
| 05 | -- | -- | -- | 0.254 | -- |
| 06 | -- | -- | -- | 0.254 | -- |
| 07 | -- | -- | -- | 0.254 | -- |
| 99 | -- | -- | -- | 0.254 | -- |
| 3 90 006 01 | -- | -- | -- | 0.254 | -- |
| 02 | -- | -- | -- | 0.254 | -- |
| 03 | -- | -- | -- | 0.254 | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 90 006 04 | -- | -- | -- | 0.254 | -- |
| 05 | -- | -- | -- | 0.254 | -- |
| 06 | -- | -- | -- | 0.254 | -- |
| 07 | -- | -- | -- | 0.254 | -- |
| 99 | -- | -- | -- | 0.254 | -- |
| 3 90 007 99 | -- | -- | -- | 0.254 | -- |
| 3 90 008 99 | -- | -- | -- | 0.254 | -- |
| 3 90 009 99 | -- | -- | -- | 0.254 | -- |
| 3 90 999 97 | -- | -- | -- | 0.254 | -- |
| 98 | -- | -- | -- | 0.254 | -- |
| 99 | -- | -- | -- | 0.254 | -- |
| 3 99 999 99 | -- | -- | -- | -- | -- |
| 4 01 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 4 01 002 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 4 01 999 99 | -- | -- | -- | -- | -- |
| 4 02 001 01 | -- | -- | -- | -- | -- |
| 4 02 003 01 | -- | -- | -- | -- | -- |
| 4 02 004 01 | -- | -- | -- | -- | -- |
| 4 02 005 01 | -- | -- | -- | -- | -- |
| 4 02 006 01 | -- | -- | -- | -- | -- |
| 4 02 999 99 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 4 03 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 4 03 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 4 03 999 99 | -- | -- | -- | -- | -- |
| 4 04 001 99 | -- | -- | -- | -- | -- |
| 4 05 001 01 | -- | -- | -- | -- | -- |
| 4 90 999 99 | -- | -- | -- | -- | -- |
| 5 01 001 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 5 01 002 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 02 | -- | -- | -- | -- | -- |
| 03 | 0.177 | 0.156 | -- | 0.146 | 0.146 |
| 5 01 005 05 | -- | -- | -- | -- | -- |
| 06 | 0.177 | -- | -- | 0.146 | 0.146 |
| 07 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 99 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 5 01 900 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |

TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 5 | 01 | 900 | 06 | -- | -- | -- | -- | -- |
| | | | 10 | -- | -- | -- | -- | -- |
| | | | 97 | -- | -- | -- | -- | -- |
| | | | 98 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 5 | 02 | 001 | 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| | | | 02 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| | | | 03 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| | | | 04 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| | | | 05 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 5 | 02 | 002 | 01 | -- | -- | -- | -- | -- |
| 5 | 02 | 003 | 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| | | | 02 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 5 | 02 | 005 | 05 | -- | -- | -- | -- | -- |
| | | | 06 | 0.177 | -- | -- | 0.146 | 0.146 |
| | | | 99 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 5 | 02 | 900 | 04 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 06 | -- | -- | -- | -- | -- |
| | | | 10 | -- | -- | -- | -- | -- |
| | | | 97 | -- | -- | -- | -- | -- |
| | | | 98 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |

**TABLE G-2 PRECISION OF UNIT EMISSION FACTORS $SO_x$**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 5 03 001 01 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 02 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 03 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 04 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 05 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 06 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 5 03 002 01 | -- | -- | -- | -- | -- |
| 02 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 03 | -- | -- | -- | -- | -- |
| 5 03 003 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 5 03 004 01 | 0.177 | -- | -- | 0.146 | 0.146 |
| 5 03 005 06 | 0.177 | -- | -- | 0.146 | 0.146 |
| 99 | 0.177 | -- | 0.146 | 0.146 | 0.146 |
| 5 03 900 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 97 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 001 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 04 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 06 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 99 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 1 01 002 01 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 02 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 03 | 0.134 | -- | 0.467 | 0.700 | 0.467 |
| 04 | 0.134 | -- | 0.700 | 0.700 | 0.700 |
| 05 | 0.134 | -- | -- | 0.700 | 0.700 |
| 06 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 07 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 08 | 0.134 | -- | 0.700 | 0.700 | 0.700 |
| 09 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 10 | 0.134 | -- | 0.700 | 0.700 | 0.700 |
| 11 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 12 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 99 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 1 01 003 01 | 0.134 | -- | -- | 0.700 | 0.700 |
| 02 | 0.134 | -- | -- | 0.700 | 0.700 |
| 03 | 0.134 | -- | -- | 0.700 | 0.700 |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 003 04 | 0.134 | -- | -- | 0.700 | 0.700 |
| 05 | 0.134 | -- | -- | 0.700 | 0.700 |
| 06 | 0.134 | -- | -- | 0.700 | 0.700 |
| 07 | 0.134 | -- | -- | 0.700 | 0.700 |
| 08 | 0.134 | -- | -- | 0.700 | 0.700 |
| 09 | 0.134 | -- | -- | 0.700 | 0.700 |
| 10 | 0.134 | -- | -- | 0.700 | 0.700 |
| 11 | 0.134 | -- | -- | 0.700 | 0.700 |
| 12 | 0.134 | -- | -- | 0.700 | 0.700 |
| 13 | 0.134 | -- | -- | 0.700 | 0.700 |
| 14 | 0.134 | -- | -- | 0.700 | 0.700 |
| 15 | 0.134 | -- | -- | 0.700 | 0.700 |
| 1 01 004 01 | 0.134 | -- | 0.050 | 0.050 | 0.050 |
| 02 | 0.134 | -- | 0.050 | 0.050 | 0.050 |
| 03 | 0.134 | -- | 0.050 | 0.050 | 0.050 |
| 1 01 005 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 1 01 006 01 | 0.134 | -- | 0.048 | 0.048 | 0.048 |
| 02 | 0.134 | -- | 0.048 | 0.048 | 0.048 |
| 03 | 0.134 | -- | 0.048 | 0.048 | 0.048 |
| 1 01 007 01 | 0.134 | -- | -- | 0.048 | 0.048 |
| 02 | 0.134 | -- | -- | 0.048 | 0.048 |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 007 03 | 0.134 | -- | -- | 0.048 | 0.048 |
| 1 01 008 01 | 0.134 | -- | -- | 0.700 | 0.700 |
| 1 01 011 02 | 0.134 | -- | -- | 0.700 | 0.700 |
| 03 | 0.134 | -- | -- | 0.700 | 0.700 |
| 1 01 012 01 | 0.134 | -- | -- | 0.700 | 0.700 |
| 02 | 0.134 | -- | -- | 0.700 | 0.700 |
| 03 | 0.134 | -- | -- | 0.700 | 0.700 |
| 1 01 999 97 | 0.134 | -- | -- | 0.700 | 0.700 |
| 98 | 0.134 | -- | -- | 0.700 | 0.700 |
| 99 | 0.134 | -- | -- | 0.700 | 0.700 |
| 1 02 001 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 04 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 06 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 07 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 99 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 1 02 002 01 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 02 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 03 | 0.134 | -- | 0.467 | 0.700 | 0.467 |
| 04 | 0.134 | -- | 0.700 | 0.700 | 0.700 |
| 05 | 0.134 | -- | 0.172 | 0.700 | 0.172 |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 002 06 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 07 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 08 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 09 | 0.134 | -- | 0.700 | 0.700 | 0.700 |
| 10 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 11 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 12 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 13 | 0.134 | -- | 0.700 | 0.700 | 0.700 |
| 14 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 99 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 1 02 003 01 | 0.134 | -- | -- | 0.700 | 0.700 |
| 02 | 0.134 | -- | -- | 0.700 | 0.700 |
| 03 | 0.134 | -- | -- | 0.700 | 0.700 |
| 04 | 0.134 | -- | -- | 0.700 | 0.700 |
| 05 | 0.134 | -- | -- | 0.700 | 0.700 |
| 06 | 0.134 | -- | -- | 0.700 | 0.700 |
| 07 | 0.134 | -- | -- | 0.700 | 0.700 |
| 08 | 0.134 | -- | -- | 0.700 | 0.700 |
| 09 | 0.134 | -- | -- | 0.700 | 0.700 |
| 10 | 0.134 | -- | -- | 0.700 | 0.700 |
| 11 | 0.134 | -- | -- | 0.700 | 0.700 |
| 12 | 0.134 | -- | -- | 0.700 | 0.700 |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 003 13 | 0.134 | -- | -- | 0.700 | 0.700 |
| 14 | 0.134 | -- | -- | 0.700 | 0.700 |
| 15 | 0.134 | -- | -- | 0.700 | 0.700 |
| 16 | 0.134 | -- | -- | 0.700 | 0.700 |
| 1 02 004 01 | 0.134 | -- | 0.003 | 0.003 | 0.003 |
| 02 | 0.134 | -- | 0.003 | 0.003 | 0.003 |
| 03 | 0.134 | -- | 0.003 | 0.003 | 0.003 |
| 1 02 005 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 1 02 006 01 | 0.134 | -- | 0.391 | 0.391 | 0.391 |
| 02 | 0.134 | -- | 0.391 | 0.391 | 0.391 |
| 03 | 0.134 | -- | 0.391 | 0.391 | 0.391 |
| 1 02 007 01 | 0.134 | -- | -- | 0.391 | 0.391 |
| 02 | 0.134 | -- | -- | 0.391 | 0.391 |
| 03 | 0.134 | -- | -- | 0.391 | 0.391 |
| 1 02 008 02 | 0.134 | -- | -- | 0.700 | 0.700 |
| 03 | 0.134 | -- | -- | 0.700 | 0.700 |
| 1 02 009 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 1 02 010 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 011 02 | 0.134 | -- | -- | 0.700 | 0.700 |
| 03 | 0.134 | -- | -- | 0.700 | 0.700 |
| 1 02 999 97 | 0.134 | -- | -- | 0.700 | 0.700 |
| 98 | 0.134 | -- | -- | 0.700 | 0.700 |
| 99 | 0.134 | -- | -- | 0.700 | 0.700 |
| 1 03 001 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 06 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 07 | 0.134 | -- | -- | 0.172 | 0.172 |
| 08 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 09 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 10 | 0.134 | -- | -- | 0.172 | 0.172 |
| 99 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 1 03 002 05 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 06 | 0.134 | -- | 0.057 | 0.700 | 0.057 |
| 07 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 08 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 09 | 0.134 | -- | 0.700 | 0.700 | 0.700 |
| 10 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 11 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 12 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 13 | 0.134 | -- | 0.700 | 0.700 | 0.700 |
| 14 | 0.134 | -- | 0.172 | 0.700 | 0.172 |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 03 002 99 | 0.134 | -- | 0.172 | 0.700 | 0.172 |
| 1 03 003 05 | 0.134 | -- | -- | 0.700 | 0.700 |
| 06 | 0.134 | -- | -- | 0.700 | 0.700 |
| 07 | 0.134 | -- | -- | 0.700 | 0.700 |
| 08 | 0.134 | -- | -- | 0.700 | 0.700 |
| 09 | 0.134 | -- | -- | 0.700 | 0.700 |
| 10 | 0.134 | -- | -- | 0.700 | 0.700 |
| 11 | 0.134 | -- | -- | 0.700 | 0.700 |
| 12 | 0.134 | -- | -- | 0.700 | 0.700 |
| 13 | 0.134 | -- | -- | 0.700 | 0.700 |
| 14 | 0.134 | -- | -- | 0.700 | 0.700 |
| 1 03 004 01 | 0.134 | -- | 0.003 | 0.003 | 0.003 |
| 02 | 0.134 | -- | 0.003 | 0.003 | 0.003 |
| 03 | 0.134 | -- | 0.003 | 0.003 | 0.003 |
| 1 03 005 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 1 03 006 01 | 0.134 | -- | 0.187 | 0.187 | 0.187 |
| 02 | 0.134 | -- | 0.187 | 0.187 | 0.187 |
| 03 | 0.134 | -- | 0.187 | 0.187 | 0.187 |
| 1 03 009 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 1 03 010 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 03 010 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 1 03 999 97 | 0.134 | -- | -- | 0.700 | 0.700 |
| 98 | 0.134 | -- | -- | 0.700 | 0.700 |
| 99 | 0.134 | -- | -- | 0.700 | 0.700 |
| 2 01 001 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 2 01 002 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 2 01 003 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 2 01 999 97 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 98 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 2 02 001 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 2 02 002 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 2 02 003 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 2 02 004 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 2 02 999 97 | 0.134 | -- | -- | 0.172 | 0.172 |
| 98 | 0.134 | -- | -- | 0.172 | 0.172 |
| 2 03 001 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 2 03 999 97 | 0.134 | -- | -- | 0.172 | 0.172 |
| 98 | 0.134 | -- | -- | 0.172 | 0.172 |
| 2 04 001 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 3 01 001 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 001 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 01 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 003 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 004 01 | 0.134 | -- | -- | 0.172 | 0.172 |
| 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 01 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 006 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 007 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 008 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 009 01 | -- | -- | -- | -- | -- |
| 10 | 0.134 | -- | -- | 0.172 | 0.172 |
| 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 01 010 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | -- | -- | -- | -- | -- |
| 04 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 05 | 0.134 | -- | -- | 0.172 | 0.172 |
| 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 01 011 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 012 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 013 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |

TABLE G-3 PRECISION OF UN'T EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 013 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 04 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 06 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 07 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 08 | -- | -- | -- | -- | -- |
| 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 01 014 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 015 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 016 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 017 01 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 017 99 | -- | -- | -- | -- | -- |
| 3 01 018 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 019 03 | -- | -- | -- | -- | -- |
| 3 01 020 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 021 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 022 01 | -- | -- | -- | -- | -- |
| 3 01 023 01 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 14 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 023 16 | -- | -- | -- | -- | -- |
| 18 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 024 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 14 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 025 01 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 026 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 026 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 09 | -- | -- | -- | -- | -- |
| 20 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 027 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 06 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 3 01 028 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 029 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 030 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 031 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 99 | -- | -- | -- | -- | -- |
| 3 01 032 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 032 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 033 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 034 01 | -- | -- | -- | -- | -- |
| 3 01 035 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 036 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 037 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 038 01 | -- | -- | -- | -- | -- |
| 3 01 039 01 | -- | -- | -- | -- | -- |
| 3 01 040 01 | -- | -- | -- | -- | -- |
| 3 01 050 01 | -- | -- | -- | -- | -- |
| 3 01 090 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 01 091 01 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 01 100 01 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 01 101 01 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 01 110 01 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 01 900 99 | -- | -- | -- | -- | -- |
| 3 01 999 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 02 001 01 | -- | -- | -- | -- | -- |

**TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 001 99 | -- | -- | -- | -- | -- |
| 3 02 002 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | -- | 0.172 | 0.172 |
| 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 02 003 01 | -- | -- | -- | -- | -- |
| 3 02 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 3 02 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 007 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 30 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 008 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 009 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 011 01 | -- | -- | -- | -- | -- |
| 3 02 012 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 013 01 | -- | -- | -- | -- | -- |
| 3 02 014 01 | -- | -- | -- | -- | -- |
| 3 02 015 01 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 015 99 | -- | -- | -- | -- | -- |
| 3 02 016 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 017 20 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 018 99 | -- | -- | -- | -- | -- |
| 3 02 030 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 999 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 000 01 | -- | -- | -- | -- | -- |
| 3 03 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 002 01 | -- | -- | -- | -- | -- |
| 3 03 003 01 | 0.134 | -- | -- | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 003 06 | -- | -- | -- | -- | -- |
| 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 03 004 01 | -- | -- | -- | -- | -- |
| 3 03 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 11 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 03 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 008 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 009 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 011 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 012 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 013 01 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 03 014 01 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 014 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 030 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 999 99 | -- | -- | -- | -- | -- |
| 3 04 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 11 | -- | -- | -- | -- | -- |
| 20 | -- | -- | -- | -- | -- |
| 50 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 | 04 | 002 | 04 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 06 | -- | -- | -- | -- | -- |
| 3 | 04 | 002 | 99 | -- | -- | -- | -- | -- |
| 3 | 04 | 003 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 30 | -- | -- | -- | -- | -- |
| | | | 40 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 04 | 004 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 04 | -- | -- | -- | -- | -- |
| | | | 08 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 04 | 005 | 01 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 04 | 006 | 01 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 04 | 007 | 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| | | | 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |

**TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 007 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 009 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 010 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 011 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 020 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 020 99 | -- | -- | -- | -- | -- |
| 3 04 050 01 | -- | -- | -- | -- | -- |
| 3 04 999 99 | -- | -- | -- | -- | -- |
| 3 05 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 003 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 06 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 99 | -- | -- | -- | -- | -- |
| 3 05 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 005 01 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 | 05 | 005 | 02 | -- | -- | -- | -- | -- |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 04 | -- | -- | -- | -- | -- |
| | | | 05 | 0.134 | -- | -- | 0.172 | 0.172 |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 05 | 006 | 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| | | | 04 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| | | | 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| | | | 99 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 3 | 05 | 007 | 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| | | | 04 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| | | | 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| | | | 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 | 05 | 008 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 05 | 009 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |

**TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 009 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 011 01 | -- | -- | -- | -- | -- |
| 20 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 012 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 04 | -- | -- | -- | -- | -- |
| 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 05 013 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 014 01 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 11 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 015 01 | -- | -- | -- | -- | -- |

**TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 015 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 016 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 017 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 018 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 019 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 020 01 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 020 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 09 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 021 01 | -- | -- | -- | -- | -- |
| 3 05 022 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 023 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 024 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 025 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 026 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 030 99 | -- | -- | -- | -- | -- |
| 3 05 999 99 | 0.134 | -- | -- | 0.172 | 0.172 |
| 3 06 001 01 | 0.134 | -- | 0.700 | 0.700 | 0.700 |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 06 001 02 | 0.134 | -- | 0.700 | 0.700 | 0.700 |
| 03 | 0.134 | -- | 0.700 | 0.700 | 0.700 |
| 04 | 0.134 | -- | 0.700 | 0.700 | 0.700 |
| 3 06 002 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 3 06 003 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 3 06 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 007 01 | -- | -- | -- | -- | -- |
| 3 06 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 3 06 009 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 06 010 01 | -- | -- | -- | -- | -- |
| 3 06 011 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 06 012 01 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 06 999 98 | 0.134 | -- | -- | 0.700 | 0.700 |
| 99 | -- | -- | -- | -- | -- |
| 3 07 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 09 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 005 01 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 07 005 99 | -- | -- | -- | -- | -- |
| 3 07 006 01 | -- | -- | -- | -- | -- |
| 3 07 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 008 99 | -- | -- | -- | -- | -- |
| 3 07 009 99 | -- | -- | -- | -- | -- |
| 3 07 010 99 | -- | -- | -- | -- | -- |
| 3 07 020 99 | -- | -- | -- | -- | -- |
| 3 07 999 99 | -- | -- | -- | -- | -- |
| 3 09 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 09 010 99 | -- | -- | -- | -- | -- |
| 3 09 020 99 | -- | -- | -- | -- | -- |
| 3 09 999 99 | -- | -- | -- | -- | -- |
| 3 20 999 99 | -- | -- | -- | -- | -- |
| 3 30 001 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 30 002 99 | -- | -- | -- | -- | -- |
| 3 30 003 99 | -- | -- | -- | -- | -- |
| 3 90 001 99 | -- | -- | -- | 0.700 | -- |
| 3 90 002 01 | -- | -- | -- | 0.700 | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 90 002 06 | -- | -- | -- | 0.700 | -- |
| 07 | -- | -- | -- | 0.700 | -- |
| 08 | -- | -- | -- | 0.700 | -- |
| 99 | -- | -- | -- | 0.700 | -- |
| 3 90 004 01 | -- | -- | -- | 0.700 | -- |
| 02 | -- | -- | -- | 0.700 | -- |
| 03 | -- | -- | -- | 0.700 | -- |
| 04 | -- | -- | -- | 0.700 | -- |
| 05 | -- | -- | -- | 0.700 | -- |
| 06 | -- | -- | -- | 0.700 | -- |
| 07 | -- | -- | -- | 0.700 | -- |
| 99 | -- | -- | -- | 0.700 | -- |
| 3 90 005 01 | -- | -- | -- | 0.700 | -- |
| 02 | -- | -- | -- | 0.700 | -- |
| 03 | -- | -- | -- | 0.700 | -- |
| 04 | -- | -- | -- | 0.700 | -- |
| 05 | -- | -- | -- | 0.700 | -- |
| 06 | -- | -- | -- | 0.700 | -- |
| 07 | -- | -- | -- | 0.700 | -- |
| 99 | -- | -- | -- | 0.700 | -- |
| 3 90 006 01 | -- | -- | -- | 0.700 | -- |
| 02 | -- | -- | -- | 0.700 | -- |
| 03 | -- | -- | -- | 0.700 | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 90 006 04 | -- | -- | -- | 0.700 | -- |
| 05 | -- | -- | -- | 0.700 | -- |
| 06 | -- | -- | -- | 0.700 | -- |
| 07 | -- | -- | -- | 0.700 | -- |
| 99 | -- | -- | -- | 0.700 | -- |
| 3 90 007 99 | -- | -- | -- | 0.700 | -- |
| 3 90 008 99 | -- | -- | -- | 0.700 | -- |
| 3 90 009 99 | -- | -- | -- | 0.700 | -- |
| 3 90 999 97 | -- | -- | -- | 0.700 | -- |
| 98 | -- | -- | -- | 0.700 | -- |
| 99 | -- | -- | -- | 0.700 | -- |
| 3 99 999 99 | -- | -- | -- | -- | -- |
| 4 01 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 4 01 002 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 4 01 999 99 | -- | -- | -- | -- | -- |
| 4 02 001 01 | -- | -- | -- | -- | -- |
| 4 02 003 01 | -- | -- | -- | -- | -- |
| 4 02 004 01 | -- | -- | -- | -- | -- |
| 4 02 005 01 | -- | -- | -- | -- | -- |
| 4 02 006 01 | -- | -- | -- | -- | -- |
| 4 02 999 99 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 4 03 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 4 03 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 4 03 999 99 | -- | -- | -- | -- | -- |
| 4 04 001 99 | -- | -- | -- | -- | -- |
| 4 05 001 01 | -- | -- | -- | -- | -- |
| 4 90 999 99 | -- | -- | -- | -- | -- |
| 5 01 001 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 5 01 002 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | -- | 0.172 | 0.172 |
| 5 01 005 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 06 | 0.134 | -- | -- | 0.172 | 0.172 |
| 07 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 99 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 5 01 900 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 5 01 900 06 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 97 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 5 02 001 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 04 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 5 02 002 01 | 0 134 | -- | 0.172 | 0.172 | 0.172 |
| 5 02 003 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 5 02 005 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 06 | 0.134 | -- | -- | 0.172 | 0.172 |
| 99 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 5 02 900 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 97 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |

TABLE G-3 PRECISION OF UNIT EMISSION FACTORS $NO_x$

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 5 03 001 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 04 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 05 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 06 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 5 03 002 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 03 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 5 03 003 01 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 02 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 5 03 004 01 | 0.134 | -- | -- | 0.172 | 0.172 |
| 5 03 005 06 | 0.134 | -- | -- | 0.172 | 0.172 |
| 99 | 0.134 | -- | 0.172 | 0.172 | 0.172 |
| 5 03 900 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 97 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |

**TABLE G-4** PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 001 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 05 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 06 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 99 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 01 002 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 05 | 0.203 | -- | -- | 0.237 | 0.237 |
| 06 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 07 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 08 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 09 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 10 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 11 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 12 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 99 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 01 003 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 03 | 0.203 | -- | -- | 0.237 | 0.237 |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 003 04 | 0.203 | -- | -- | 0.237 | 0.237 |
| 05 | 0.203 | -- | -- | 0.237 | 0.237 |
| 06 | 0.203 | -- | -- | 0.237 | 0.237 |
| 07 | 0.203 | -- | -- | 0.237 | 0.237 |
| 08 | 0.203 | -- | -- | 0.237 | 0.237 |
| 09 | 0.203 | -- | -- | 0.237 | 0.237 |
| 10 | 0.203 | -- | -- | 0.237 | 0.237 |
| 11 | 0.203 | -- | -- | 0.237 | 0.237 |
| 12 | 0.203 | -- | -- | 0.237 | 0.2.. |
| 13 | 0.203 | -- | -- | 0.237 | 0.237 |
| 14 | 0.203 | -- | -- | 0.237 | 0.237 |
| 15 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 01 004 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 01 005 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 01 006 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 01 007 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 02 | 0.203 | -- | -- | 0.237 | 0.237 |

**TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 007 03 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 01 008 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 01 011 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 03 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 01 012 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 03 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 01 999 97 | 0.203 | -- | -- | 0.237 | 0.237 |
| 98 | 0.203 | -- | -- | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 02 001 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 05 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 06 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 07 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 99 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 02 002 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 05 | 0.203 | -- | 0.237 | 0.237 | 0.237 |

**TABLE G-4** PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 002 06 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 07 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 08 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 09 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 10 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 11 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 12 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 13 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 14 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 99 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 02 003 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 03 | 0.203 | -- | -- | 0.237 | 0.237 |
| 04 | 0.203 | -- | -- | 0.237 | 0.237 |
| 05 | 0.203 | -- | -- | 0.237 | 0.237 |
| 06 | 0.203 | -- | -- | 0.237 | 0.237 |
| 07 | 0.203 | -- | -- | 0.237 | 0.237 |
| 08 | 0.203 | -- | -- | 0.237 | 0.237 |
| 09 | 0.203 | -- | -- | 0.237 | 0.237 |
| 10 | 0.203 | -- | -- | 0.237 | 0.237 |
| 11 | 0.203 | -- | -- | 0.237 | 0.237 |
| 12 | 0.203 | -- | -- | 0.237 | 0.237 |

**TABLE G-4** PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 003 13 | 0.203 | -- | -- | 0.237 | 0.237 |
| 14 | 0.203 | -- | -- | 0.237 | 0.237 |
| 15 | 0.203 | -- | -- | 0.237 | 0.237 |
| 16 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 02 004 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 02 005 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 02 006 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 02 007 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 03 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 02 008 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 03 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 02 009 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 02 010 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 011 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 03 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 02 999 97 | 0.203 | -- | -- | 0.237 | 0.237 |
| 98 | 0.203 | -- | -- | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 03 001 05 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 06 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 07 | 0.203 | -- | -- | 0.237 | 0.237 |
| 08 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 09 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 10 | 0.203 | -- | -- | 0.237 | 0.237 |
| 99 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 03 002 05 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 06 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 07 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 08 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 09 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 10 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 11 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 12 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 13 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 14 | 0.203 | -- | 0.237 | 0.237 | 0.237 |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 03 002 99 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 03 003 05 | 0.203 | -- | -- | 0.237 | 0.237 |
| 06 | 0.203 | -- | -- | 0.237 | 0.237 |
| 07 | 0.203 | -- | -- | 0.237 | 0.237 |
| 08 | 0.203 | -- | -- | 0.237 | 0.237 |
| 09 | 0.203 | -- | -- | 0.237 | 0.237 |
| 10 | 0.203 | -- | -- | 0.237 | 0.237 |
| 11 | 0.203 | -- | -- | 0.237 | 0.237 |
| 12 | 0.203 | -- | -- | 0.237 | 0.237 |
| 13 | 0.203 | -- | -- | 0.237 | 0.237 |
| 14 | 0.203 | -- | -- | 0.237 | 0.237 |
| 1 03 004 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 03 005 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 03 006 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 03 009 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 03 010 02 | 0,203 | -- | 0.237 | 0.237 | 0.237 |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 03 010 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 1 03 999 97 | 0.203 | -- | -- | 0.237 | 0.237 |
| 98 | 0.203 | -- | -- | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 2 01 001 01 | -- | -- | -- | -- | -- |
| 2 01 002 01 | -- | -- | -- | -- | -- |
| 2 01 003 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 2 01 999 97 | -- | -- | -- | -- | -- |
| 98 | 0.203 | 0.237 | 0.237 | 0.237 | 0.237 |
| 2 02 001 01 | -- | -- | -- | -- | -- |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 2 02 002 01 | -- | -- | -- | -- | -- |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 2 02 003 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 2 02 004 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 2 02 999 97 | -- | -- | -- | -- | -- |
| 98 | 0.203 | -- | -- | 0.237 | 0.237 |
| 2 03 001 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 2 03 999 97 | -- | -- | -- | -- | -- |
| 98 | 0.203 | -- | -- | 0.237 | 0.237 |
| 2 04 001 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 01 001 01 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 001 99 | -- | -- | -- | -- | -- |
| 3 01 002 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | -- | -- | -- | -- | -- |
| 3 01 003 01 | -- | -- | -- | -- | -- |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | -- | -- | -- | -- | -- |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 01 004 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 005 01 | 0.203 | -- | 0.921 | 0.921 | 0.921 |
| 02 | -- | -- | -- | -- | -- |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 05 | 0.203 | -- | -- | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 01 006 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 99 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 01 007 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 008 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 009 01 | -- | -- | -- | -- | -- |
| 10 | 0.203 | -- | -- | 0.921 | 0.921 |
| 99 | 0.203 | -- | -- | 0.921 | 0.921 |
| 3 01 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | 0.203 | -- | -- | 0.921 | 0.921 |
| 99 | -- | -- | -- | -- | -- |
| 3 01 011 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 012 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 013 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 013 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 014 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | -- | -- | -- | -- | -- |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 01 015 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 05 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 01 016 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 017 01 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 017 99 | -- | -- | -- | -- | -- |
| 3 01 018 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 019 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 01 020 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 05 | -- | -- | -- | -- | -- |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 01 021 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 022 01 | -- | -- | -- | -- | -- |
| 3 01 023 01 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 14 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR BC

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 | 01 | 023 | 16 | -- | -- | -- | -- | -- |
| | | | 18 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 01 | 024 | 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 04 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 05 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 06 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 08 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 10 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 12 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 14 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 | 01 | 025 | 01 | -- | -- | -- | -- | -- |
| | | | 05 | 0.203 | -- | -- | 0.921 | 0.921 |
| | | | 10 | -- | -- | -- | -- | -- |
| | | | 99 | 0.203 | -- | -- | 0.921 | 0.921 |
| 3 | 01 | 026 | 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 05 | 0.203 | -- | 0.237 | 0.237 | 0.237 |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR EC

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 | 01 | 026 | 06 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 07 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 08 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 09 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 20 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 | 01 | 027 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 04 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 06 | -- | -- | -- | -- | -- |
| 3 | 01 | 028 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| 3 | 01 | 029 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| 3 | 01 | 030 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 01 | 031 | 01 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 01 | 032 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR BC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 032 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 033 01 | 0.203 | -- | -- | 0.921 | 0.921 |
| 99 | 0.203 | -- | -- | 0.921 | 0.921 |
| 3 01 034 01 | -- | -- | -- | -- | -- |
| 3 01 035 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 036 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 037 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 038 01 | -- | -- | -- | -- | -- |
| 3 01 039 01 | -- | -- | -- | -- | -- |
| 3 01 040 01 | -- | -- | -- | -- | -- |
| 3 01 050 01 | 0.203 | -- | -- | 0.921 | 0.921 |
| 3 01 090 99 | -- | -- | -- | -- | -- |
| 3 01 091 01 | 0.203 | -- | -- | 0.921 | 0.921 |
| 3 01 100 01 | 0.203 | -- | -- | 0.921 | 0.921 |
| 3 01 101 01 | -- | -- | -- | -- | -- |
| 3 01 110 01 | -- | -- | -- | -- | -- |
| 3 01 900 99 | -- | -- | -- | -- | -- |
| 3 01 99 99 | 0.203 | -- | -- | 0.921 | 0.921 |
| 3 02 001 01 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 001 99 | -- | -- | -- | -- | -- |
| 3 02 002 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | -- | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 02 003 01 | -- | -- | -- | -- | -- |
| 3 02 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 3 02 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 007 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR SIC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 007 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 30 | -- | -- | -- | -- | -- |
| 99 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 02 008 01 | -- | -- | -- | -- | -- |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 02 009 01 | -- | -- | -- | -- | -- |
| 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 03 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 010 01 | -- | -- | -- | -- | -- |
| 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 02 011 01 | -- | -- | -- | -- | -- |
| 3 02 012 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 013 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 02 014 01 | -- | -- | -- | -- | -- |
| 3 02 015 01 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 015 99 | -- | -- | -- | -- | -- |
| 3 02 016 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 017 20 | 0.203 | -- | -- | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 02 018 99 | -- | -- | -- | -- | -- |
| 3 02 030 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 999 98 | 0.203 | -- | -- | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 03 000 01 | -- | -- | -- | -- | -- |
| 3 03 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 002 01 | -- | -- | -- | -- | -- |
| 3 03 003 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 003 06 | -- | -- | -- | -- | -- |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 03 004 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 03 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 11 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 03 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 008 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 03 009 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 011 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 012 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 013 01 | -- | -- | -- | -- | -- |
| 3 03 014 01 | -- | -- | -- | -- | -- |

**TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 014 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 030 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 999 99 | -- | -- | -- | -- | -- |
| 3 04 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 11 | -- | -- | -- | -- | -- |
| 20 | 0.203 | -- | -- | 0.237 | 0.237 |
| 50 | -- | -- | -- | -- | -- |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 04 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |

**TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 002 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 3 04 002 99 | -- | -- | -- | -- | -- |
| 3 04 003 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 30 | -- | -- | -- | -- | -- |
| 40 | -- | -- | -- | -- | -- |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 04 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 005 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 006 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

**TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 007 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 009 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 010 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 011 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 020 01 | -- | -- | -- | -- | -- |
| 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 03 | -- | -- | -- | -- | -- |
| 04 | 0.203 | -- | -- | 0.237 | 0.237 |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 020 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 04 050 01 | -- | -- | -- | -- | -- |
| 3 04 999 99 | -- | -- | -- | -- | -- |
| 3 05 001 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 003 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 05 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 06 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 99 | -- | -- | -- | -- | -- |
| 3 05 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 99 | -- | -- | -- | -- | -- |
| 3 05 005 01 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 005 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 009 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

**TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 009 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 011 01 | -- | -- | -- | -- | -- |
| 20 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 012 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 013 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 014 01 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 11 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 015 01 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 015 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 016 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 017 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 018 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 019 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 020 01 | -- | -- | -- | -- | -- |

**TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 020 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 09 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 021 01 | -- | -- | -- | -- | -- |
| 3 05 022 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 023 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 024 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 025 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 026 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 030 99 | -- | -- | -- | -- | -- |
| 3 05 999 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 06 001 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 06 001 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 06 002 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 06 003 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 06 004 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 06 005 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 06 006 01 | -- | -- | -- | -- | -- |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 06 007 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 06 008 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 05 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 3 06 009 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 06 010 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 06 011 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 06 012 01 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 06 999 98 | 0.203 | -- | -- | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 07 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 09 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 005 01 | 0.203 | -- | -- | 0.237 | 0.237 |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 07 005 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 07 006 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 07 007 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 008 99 | -- | -- | -- | -- | -- |
| 3 07 009 99 | -- | -- | -- | -- | -- |
| 3 07 010 99 | -- | -- | -- | -- | -- |
| 3 07 020 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 07 999 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 09 001 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 02 | 0.203 | -- | -- | 0.237 | 0.237 |
| 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 09 010 99 | -- | -- | -- | -- | -- |
| 3 09 020 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 09 999 99 | 0.203 | -- | -- | 0.237 | 0.237 |
| 3 20 999 99 | -- | -- | -- | -- | -- |
| 3 30 001 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 30 002 99 | 0.203 | -- | -- | 0.921 | 0.921 |
| 3 30 003 99 | 0.203 | -- | -- | 0.921 | 0.921 |
| 3 90 001 99 | -- | -- | -- | 0.237 | -- |
| 3 90 002 01 | -- | -- | -- | 0.237 | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 90 002 06 | -- | -- | -- | 0.237 | -- |
| 07 | -- | -- | -- | 0.237 | -- |
| 08 | -- | -- | -- | 0.237 | -- |
| 99 | -- | -- | -- | 0.237 | -- |
| 3 90 004 01 | -- | -- | -- | 0.237 | -- |
| 02 | -- | -- | -- | 0.237 | -- |
| 03 | -- | -- | -- | 0.237 | -- |
| 04 | -- | -- | -- | 0.237 | -- |
| 05 | -- | -- | -- | 0.237 | -- |
| 06 | -- | -- | -- | 0.237 | -- |
| 07 | -- | -- | -- | 0.237 | -- |
| 99 | -- | -- | -- | 0.237 | -- |
| 3 90 005 01 | -- | -- | -- | 0.237 | -- |
| 02 | -- | -- | -- | 0.237 | -- |
| 03 | -- | -- | -- | 0.237 | -- |
| 04 | -- | -- | -- | 0.237 | -- |
| 05 | -- | -- | -- | 0.237 | -- |
| 06 | -- | -- | -- | 0.237 | -- |
| 07 | -- | -- | -- | 0.237 | -- |
| 99 | -- | -- | -- | 0.237 | -- |
| 3 90 006 01 | -- | -- | -- | 0.237 | -- |
| 02 | -- | -- | -- | 0.237 | -- |
| 03 | -- | -- | -- | 0.237 | -- |

**TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC**

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 | 90 | 006 | 04 | -- | -- | -- | 0.237 | -- |
| | | | 05 | -- | -- | -- | 0.237 | -- |
| | | | 06 | -- | -- | -- | 0.237 | -- |
| | | | 07 | -- | -- | -- | 0.237 | -- |
| | | | 99 | -- | -- | -- | 0.237 | -- |
| 3 | 90 | 007 | 99 | -- | -- | -- | 0.237 | -- |
| 3 | 90 | 008 | 99 | -- | -- | -- | 0.237 | -- |
| 3 | 90 | 009 | 99 | -- | -- | -- | 0.237 | -- |
| 3 | 90 | 999 | 97 | -- | -- | -- | 0.237 | -- |
| | | | 98 | -- | -- | -- | 0.237 | -- |
| | | | 99 | -- | -- | -- | 0.237 | -- |
| 3 | 99 | 999 | 99 | -- | -- | -- | 0.237 | -- |
| 4 | 01 | 001 | 01 | 0.203 | 0.237 | 0.237 | 0.237 | 0.237 |
| | | | 02 | 0.203 | 0.237 | 0.237 | 0.237 | 0.237 |
| 4 | 01 | 002 | 01 | 0.203 | 0.000 | -- | 0.237 | 0.237 |
| | | | 99 | 0.203 | 0.000 | -- | 0.237 | 0.237 |
| 4 | 01 | 999 | 99 | 0.203 | 0.000 | -- | 0.237 | 0.237 |
| 4 | 02 | 001 | 01 | 0.203 | 0.921 | 0.921 | 0.921 | 0.921 |
| 4 | 02 | 003 | 01 | 0.203 | 0.237 | 0.237 | 0.237 | 0.237 |
| 4 | 02 | 004 | 01 | 0.203 | 0.237 | 0.237 | 0.237 | 0.237 |
| 4 | 02 | 005 | 01 | 0.203 | 0.237 | 0.237 | 0.237 | 0.237 |
| 4 | 02 | 006 | 01 | 0.203 | 0.237 | 0.237 | 0.237 | 0.237 |
| 4 | 02 | 999 | 99 | 0.203 | 0.921 | -- | 0.921 | 0.921 |

**TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC**

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 4 | 03 | 001 | 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 4 | 03 | 002 | 01 | 0.203 | -- | 0.164 | 0.310 | 0.164 |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | 0.203 | -- | 0.310 | 0.310 | 0.310 |
| | | | 04 | -- | -- | -- | -- | -- |
| 4 | 03 | 999 | 99 | 0.203 | -- | -- | 0.310 | 0.310 |
| 4 | 04 | 001 | 99 | 0.203 | -- | -- | 0.921 | 0.921 |
| 4 | 05 | 001 | 01 | 0.203 | 0.000 | -- | 0.921 | 0.921 |
| 4 | 90 | 999 | 99 | 0.203 | -- | -- | 0.921 | 0.921 |
| 5 | 01 | 001 | 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 5 | 01 | 002 | 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 03 | 0.203 | -- | -- | 0.237 | 0.237 |
| 5 | 01 | 005 | 05 | -- | -- | -- | -- | -- |
| | | | 06 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 07 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 99 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 5 | 01 | 900 | 04 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |

**TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR HC**

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 5 | 01 | 900 | 06 | -- | -- | -- | -- | -- |
| | | | 10 | -- | -- | -- | -- | -- |
| | | | 97 | -- | -- | -- | -- | -- |
| | | | 98 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 5 | 02 | 001 | 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 05 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 5 | 02 | 002 | 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 5 | 02 | 003 | 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 5 | 02 | 005 | 05 | -- | -- | -- | -- | -- |
| | | | 06 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 99 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 5 | 02 | 900 | 04 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 06 | -- | -- | -- | -- | -- |
| | | | 10 | -- | -- | -- | -- | -- |
| | | | 97 | -- | -- | -- | -- | -- |
| | | | 98 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |

TABLE G-4 PRECISION OF UNIT EMISSION FACTORS FOR EC

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 5 | 03 | 001 | 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 04 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 05 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 06 | -- | -- | -- | -- | -- |
| 5 | 03 | 002 | 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 02 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 03 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 5 | 03 | 003 | 01 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| | | | 02 | -- | -- | -- | -- | -- |
| 5 | 03 | 004 | 01 | 0.203 | -- | -- | 0.237 | 0.237 |
| 5 | 03 | 005 | 06 | 0.203 | -- | -- | 0.237 | 0.237 |
| | | | 99 | 0.203 | -- | 0.237 | 0.237 | 0.237 |
| 5 | 03 | 900 | 04 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 06 | -- | -- | -- | -- | -- |
| | | | 07 | -- | -- | -- | -- | -- |
| | | | 10 | -- | -- | -- | -- | -- |
| | | | 97 | -- | -- | -- | -- | -- |
| | | | 98 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 001 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 04 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 05 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 06 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 99 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 01 002 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 04 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 05 | 0.321 | -- | -- | 0.357 | 0.357 |
| 06 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 07 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 08 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 09 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 10 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 11 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 12 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 99 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 01 003 01 | 0.321 | -- | -- | 0.357 | 0.357 |
| 02 | 0.321 | -- | -- | 0.357 | 0.357 |
| 03 | 0.321 | -- | -- | 0.357 | 0.357 |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 003 04 | 0.321 | -- | -- | 0.357 | 0.357 |
| 05 | 0.321 | -- | -- | 0.357 | 0.357 |
| 06 | 0.321 | -- | -- | 0.357 | 0.357 |
| 07 | 0.321 | -- | -- | 0.357 | 0.357 |
| 08 | 0.321 | -- | -- | 0.357 | 0.357 |
| 09 | 0.321 | -- | -- | 0.357 | 0.357 |
| 10 | 0.321 | -- | -- | 0.357 | 0.357 |
| 11 | 0.321 | -- | -- | 0.357 | 0.357 |
| 12 | 0.321 | -- | -- | 0.357 | 0.357 |
| 13 | 0.321 | -- | -- | 0.357 | 0.357 |
| 14 | 0.321 | -- | -- | 0.357 | 0.357 |
| 15 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 01 004 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 01 005 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 01 006 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 01 007 01 | 0.321 | -- | -- | 0.357 | 0.357 |
| 02 | 0.321 | -- | -- | 0.357 | 0.357 |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 01 007 03 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 01 008 01 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 01 011 02 | 0.321 | -- | -- | 0.357 | 0.357 |
| 03 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 01 012 01 | 0.321 | -- | -- | 0.357 | 0.357 |
| 02 | 0.321 | -- | -- | 0.357 | 0.357 |
| 03 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 01 999 97 | 0.321 | -- | -- | 0.357 | 0.357 |
| 98 | 0.321 | -- | -- | 0.357 | 0.357 |
| 99 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 02 001 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 04 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 05 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 06 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 07 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 99 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 02 002 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 04 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 05 | 0.321 | -- | 0.357 | 0.357 | 0.357 |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 002 06 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 07 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 08 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 09 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 10 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 11 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 12 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 13 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 14 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 99 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 02 003 01 | 0.321 | -- | -- | 0.357 | 0.357 |
| 02 | 0.321 | -- | -- | 0.357 | 0.357 |
| 03 | 0.321 | -- | -- | 0.357 | 0.357 |
| 04 | 0.321 | -- | -- | 0.357 | 0.357 |
| 05 | 0.321 | -- | -- | 0.357 | 0.357 |
| 06 | 0.321 | -- | -- | 0.357 | 0.357 |
| 07 | 0.321 | -- | -- | 0.357 | 0.357 |
| 08 | 0.321 | -- | -- | 0.357 | 0.357 |
| 09 | 0.321 | -- | -- | 0.357 | 0.357 |
| 10 | 0.321 | -- | -- | 0.357 | 0.357 |
| 11 | 0.321 | -- | -- | 0.357 | 0.357 |
| 12 | 0.321 | -- | -- | 0.357 | 0.357 |

TABLE G-5 PRECISION OF CN'T EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 003 13 | 0.321 | -- | -- | 0.357 | 0.357 |
| 14 | 0.321 | -- | -- | 0.357 | 0.357 |
| 15 | 0.321 | -- | -- | 0.357 | 0.357 |
| 16 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 02 004 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 02 005 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 02 006 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 02 007 01 | 0.321 | -- | -- | 0.357 | 0.357 |
| 02 | 0.321 | -- | -- | 0.357 | 0.357 |
| 03 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 02 008 02 | 0.321 | -- | -- | 0.357 | 0.357 |
| 03 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 02 009 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 02 010 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 02 011 02 | 0.321 | -- | -- | 0.357 | 0.357 |
| 03 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 02 999 97 | 0.321 | -- | -- | 0.357 | 0.357 |
| 98 | 0.321 | -- | -- | 0.357 | 0.357 |
| 99 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 03 001 05 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 06 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 07 | 0.321 | -- | -- | 0.357 | 0.357 |
| 08 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 09 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 10 | 0.321 | -- | -- | 0.357 | 0.357 |
| 99 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 03 002 05 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 06 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 07 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 08 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 09 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 10 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 11 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 12 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 13 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 14 | 0.321 | -- | 0.357 | 0.357 | 0.357 |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 03 002 99 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 03 003 05 | 0.321 | -- | -- | 0.357 | 0.357 |
| 06 | 0.321 | -- | -- | 0.357 | 0.357 |
| 07 | 0.321 | -- | -- | 0.357 | 0.357 |
| 08 | 0.321 | -- | -- | 0.357 | 0.357 |
| 09 | 0.321 | -- | -- | 0.357 | 0.357 |
| 10 | 0.321 | -- | -- | 0.357 | 0.357 |
| 11 | 0.321 | -- | -- | 0.357 | 0.357 |
| 12 | 0.321 | -- | -- | 0.357 | 0.357 |
| 13 | 0.321 | -- | -- | 0.357 | 0.357 |
| 14 | 0.321 | -- | -- | 0.357 | 0.357 |
| 1 03 004 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 03 005 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 03 006 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 03 009 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 03 010 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 1 03 010 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 1 03 999 97 | 0.321 | -- | -- | 0.357 | 0.357 |
| 98 | 0.321 | -- | -- | 0.357 | 0.357 |
| 99 | 0.321 | -- | -- | 0.357 | 0.357 |
| 2 01 001 01 | -- | -- | -- | -- | -- |
| 2 01 002 01 | -- | -- | -- | -- | -- |
| 2 01 003 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 2 01 999 97 | -- | -- | -- | -- | -- |
| 98 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 2 02 001 01 | -- | -- | -- | -- | -- |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 2 02 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 2 02 003 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 2 02 004 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 2 02 999 97 | -- | -- | -- | -- | -- |
| 98 | 0.321 | -- | -- | 0.357 | 0.357 |
| 2 03 001 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 2 03 999 97 | -- | -- | -- | -- | -- |
| 98 | 0.321 | -- | -- | 0.357 | 0.357 |
| 2 04 001 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 3 01 001 01 | -- | -- | -- | -- | -- |

**TABLE G-5 PRECISION OF UN'T EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 001 99 | -- | -- | -- | -- | -- |
| 3 01 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 003 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | 0.321 | -- | -- | 0.357 | 0.357 |
| 3 01 004 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 005 01 | 0.321 | -- | 0.709 | 0.709 | 0.709 |
| 02 | -- | -- | -- | -- | -- |
| 03 | 0.321 | -- | 0.564 | 0.709 | 0.564 |
| 04 | 0.321 | -- | 0.257 | 0.709 | 0.257 |
| 05 | 0.321 | -- | -- | 0.709 | 0.709 |
| 99 | 0.321 | -- | -- | 0.709 | 0.709 |
| 3 01 006 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 99 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 3 01 007 01 | 0.321 | -- | -- | 0.709 | 0.709 |
| 99 | 0.321 | -- | -- | 0.709 | 0.709 |
| 3 01 008 01 | 0.321 | -- | -- | 0.709 | 0.709 |
| 02 | 0.321 | -- | -- | 0.709 | 0.709 |

TABLE G-5 PRECISION OF UN'T EMISSION FACTORS CO

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 | 01 | 008 | 03 | -- | -- | -- | -- | -- |
| | | | 04 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 01 | 009 | 01 | -- | -- | -- | -- | -- |
| | | | 10 | 0.321 | -- | -- | 0.709 | 0.709 |
| | | | 99 | 0.321 | -- | -- | 0.709 | 0.709 |
| 3 | 01 | 010 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 04 | -- | -- | -- | -- | -- |
| | | | 05 | 0.321 | -- | -- | 0.709 | 0.709 |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 01 | 011 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 01 | 012 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 01 | 013 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UN'T EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 013 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 014 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 015 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 016 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 017 01 | -- | -- | -- | -- | -- |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 017 99 | -- | -- | -- | -- | -- |
| 3 01 018 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 019 03 | -- | -- | -- | -- | -- |
| 3 01 020 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 021 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 022 01 | -- | -- | -- | -- | -- |
| 3 01 023 01 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 14 | -- | -- | -- | -- | -- |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 023 16 | -- | -- | -- | -- | -- |
| 18 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 024 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 14 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 025 01 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 026 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 026 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 09 | -- | -- | -- | -- | -- |
| 20 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 027 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 3 01 028 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 029 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 030 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 031 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 032 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 01 032 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 033 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 034 01 | -- | -- | -- | -- | -- |
| 3 01 035 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 01 036 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 037 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 01 038 01 | -- | -- | -- | -- | -- |
| 3 01 039 01 | -- | -- | -- | -- | -- |
| 3 01 040 01 | -- | -- | -- | -- | -- |
| 3 01 050 01 | -- | -- | -- | -- | -- |
| 3 01 090 99 | -- | -- | -- | -- | -- |
| 3 01 091 01 | -- | -- | -- | -- | -- |
| 3 01 100 01 | -- | -- | -- | -- | -- |
| 3 01 101 01 | -- | -- | -- | -- | -- |
| 3 01 110 01 | -- | -- | -- | -- | -- |
| 3 01 900 99 | -- | -- | -- | -- | -- |
| 3 01 999 99 | 0.321 | -- | -- | 0.709 | 0.709 |
| 3 02 001 01 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS. CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 001 99 | -- | -- | -- | -- | -- |
| 3 02 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 003 01 | -- | -- | -- | -- | -- |
| 3 02 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 3 02 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 007 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 30 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 008 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 009 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 011 01 | -- | -- | -- | -- | -- |
| 3 02 012 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 013 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 3 02 014 01 | -- | -- | -- | -- | -- |
| 3 02 015 01 | -- | -- | -- | -- | -- |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 02 015 99 | -- | -- | -- | -- | -- |
| 3 02 016 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 017 20 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 018 99 | -- | -- | -- | -- | -- |
| 3 02 030 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 02 999 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 000 01 | -- | -- | -- | -- | -- |
| 3 03 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 002 01 | -- | -- | -- | -- | -- |
| 3 03 003 01 | 0.321 | -- | -- | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |

Table G-3 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 003 06 | -- | -- | -- | -- | -- |
| 99 | 0.321 | -- | -- | 0.357 | 0.357 |
| 3 03 004 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 3 03 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 006 01 | 0.321 | -- | -- | 0.709 | 0.709 |
| 02 | 0.321 | -- | -- | 0.709 | 0.709 |
| 03 | 0.321 | -- | -- | 0.709 | 0.709 |
| 04 | 0.321 | -- | -- | 0.709 | 0.709 |
| 05 | 0.321 | -- | -- | 0.709 | 0.709 |
| 10 | 0.321 | -- | -- | 0.709 | 0.709 |
| 11 | 0.321 | -- | -- | 0.709 | 0.709 |
| 12 | 0.321 | -- | -- | 0.709 | 0.709 |
| 99 | 0.321 | -- | -- | 0.709 | 0.709 |
| 3 03 007 01 | 0.321 | -- | -- | 0.709 | 0.709 |
| 02 | 0.321 | -- | -- | 0.709 | 0.709 |
| 3 03 008 01 | 0.321 | -- | 0.250 | 0.709 | 0.250 |
| 02 | -- | -- | -- | -- | -- |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 | 03 | 008 | 03 | 0.321 | -- | 0.709 | 0.709 | 0.709 |
| | | | 04 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 06 | -- | -- | -- | -- | -- |
| | | | 07 | -- | -- | -- | -- | -- |
| | | | 99 | 0.321 | -- | -- | 0.709 | 0.709 |
| 3 | 03 | 009 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| | | | 04 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| | | | 05 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| | | | 99 | 0.321 | -- | -- | 0.357 | 0.357 |
| 3 | 03 | 010 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 03 | 011 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 03 | 012 | 01 | 0.321 | -- | -- | 0.709 | 0.709 |
| | | | 99 | 0.321 | -- | -- | 0.709 | 0.709 |
| 3 | 03 | 013 | 01 | -- | -- | -- | -- | -- |
| 3 | 03 | 014 | 01 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 03 014 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 030 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 03 999 99 | -- | -- | -- | -- | -- |
| 3 04 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 11 | -- | -- | -- | -- | -- |
| 20 | -- | -- | -- | -- | -- |
| 50 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 002 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 3 04 002 99 | -- | -- | -- | -- | -- |
| 3 04 003 01 | 0.321 | -- | 0.709 | 0.709 | 0.709 |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 30 | -- | -- | -- | -- | -- |
| 40 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 005 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 006 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 04 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | | | | Emission estimate method | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 | 04 | 007 | 03 | -- | -- | -- | -- | -- |
| | | | 04 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 04 | 008 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 04 | -- | -- | -- | -- | -- |
| | | | 05 | -- | -- | -- | -- | -- |
| | | | 06 | -- | -- | -- | -- | -- |
| | | | 07 | -- | -- | -- | -- | -- |
| | | | 08 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 04 | 009 | 01 | -- | -- | -- | -- | -- |
| | | | 99 | -- | -- | -- | -- | -- |
| 3 | 04 | 010 | 01 | 0.321 | -- | -- | 0.709 | 0.709 |
| | | | 99 | 0.321 | -- | -- | 0.709 | 0.709 |
| 3 | 04 | 011 | 01 | 0.321 | -- | -- | 0.709 | 0.709 |
| | | | 99 | 0.321 | -- | -- | 0.709 | 0.709 |
| 3 | 04 | 020 | 01 | -- | -- | -- | -- | -- |
| | | | 02 | -- | -- | -- | -- | -- |
| | | | 03 | -- | -- | -- | -- | -- |
| | | | 04 | 0.321 | -- | -- | 0.709 | 0.709 |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 04 020 99 | 0.321 | -- | -- | 0.709 | 0.709 |
| 3 04 050 01 | -- | -- | -- | -- | -- |
| 3 04 999 99 | -- | -- | -- | -- | -- |
| 3 05 001 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 003 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 05 | -- | -- | -- | -- | -- |
| 06 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 99 | -- | -- | -- | -- | -- |
| 3 05 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 005 01 | -- | -- | -- | -- | -- |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 005 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 009 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 009 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 010 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 011 01 | -- | -- | -- | -- | -- |
| 20 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 012 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 04 | -- | -- | -- | -- | -- |
| 05 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 99 | 0.321 | -- | -- | 0.357 | 0.357 |
| 3 05 013 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 014 01 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 11 | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 015 01 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 015 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 016 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 017 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 018 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 019 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 020 01 | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 05 020 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 09 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 021 01 | -- | -- | -- | -- | -- |
| 3 05 022 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 023 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 024 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 025 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 026 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 05 030 99 | -- | -- | -- | -- | -- |
| 3 05 999 99 | -- | -- | -- | -- | -- |
| 3 06 001 01 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 06 001 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 3 06 002 01 | 0.321 | -- | 0.709 | 0.709 | 0.709 |
| 3 06 003 01 | 0.321 | -- | 0.709 | 0.709 | 0.709 |
| 3 06 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 005 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 006 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 3 06 007 01 | -- | -- | -- | -- | -- |
| 3 06 008 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 3 06 009 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 06 010 01 | -- | -- | -- | -- | -- |
| 3 06 011 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 99 | 0.321 | -- | -- | 0.357 | 0.357 |
| 3 06 012 01 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 06 999 98 | 0.321 | -- | -- | 0.709 | 0.709 |
| 99 | -- | -- | -- | -- | -- |
| 3 07 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 05 | -- | -- | -- | -- | -- |
| 06 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 07 | -- | -- | -- | -- | -- |
| 08 | -- | -- | -- | -- | -- |
| 09 | -- | -- | -- | -- | -- |
| 99 | 0.321 | -- | -- | 0.357 | 0.357 |
| 3 07 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 99 | 0.321 | -- | -- | 0.357 | 0.357 |
| 3 07 004 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 005 01 | -- | -- | -- | -- | -- |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 07 005 99 | -- | -- | -- | -- | -- |
| 3 07 006 01 | -- | -- | -- | -- | -- |
| 3 07 007 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 07 008 99 | -- | -- | -- | -- | -- |
| 3 07 009 99 | -- | -- | -- | -- | -- |
| 3 07 010 99 | -- | -- | -- | -- | -- |
| 3 07 020 99 | -- | -- | -- | -- | -- |
| 3 07 999 99 | -- | -- | -- | -- | -- |
| 3 09 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 09 010 99 | -- | -- | -- | -- | -- |
| 3 09 020 99 | -- | -- | -- | -- | -- |
| 3 09 999 99 | -- | -- | -- | -- | -- |
| 3 20 999 99 | -- | -- | -- | -- | -- |
| 3 30 001 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 3 30 002 99 | -- | -- | -- | -- | -- |
| 3 30 003 99 | -- | -- | -- | -- | -- |
| 3 90 001 99 | -- | -- | -- | 0.357 | -- |
| 3 90 002 01 | -- | -- | -- | 0.357 | -- |

**TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO**

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 90 002 06 | -- | -- | -- | 0.357 | -- |
| 07 | -- | -- | -- | 0.357 | -- |
| 08 | -- | -- | -- | 0.357 | -- |
| 99 | -- | -- | -- | 0.357 | -- |
| 3 90 004 01 | -- | -- | -- | 0.357 | -- |
| 02 | -- | -- | -- | 0.357 | -- |
| 03 | -- | -- | -- | 0.357 | -- |
| 04 | -- | -- | -- | 0.357 | -- |
| 05 | -- | -- | -- | 0.357 | -- |
| 06 | -- | -- | -- | 0.357 | -- |
| 07 | -- | -- | -- | 0.357 | -- |
| 99 | -- | -- | -- | 0.357 | -- |
| 3 90 005 01 | -- | -- | -- | 0.357 | -- |
| 02 | -- | -- | -- | 0.357 | -- |
| 03 | -- | -- | -- | 0.357 | -- |
| 04 | -- | -- | -- | 0.357 | -- |
| 05 | -- | -- | -- | 0.357 | -- |
| 06 | -- | -- | -- | 0.357 | -- |
| 07 | -- | -- | -- | 0.357 | -- |
| 99 | -- | -- | -- | 0.357 | -- |
| 3 90 006 01 | -- | -- | -- | 0.357 | -- |
| 02 | -- | -- | -- | 0.357 | -- |
| 03 | -- | -- | -- | 0.357 | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 3 90 006 04 | -- | -- | -- | 0.357 | -- |
| 05 | -- | -- | -- | 0.357 | -- |
| 06 | -- | -- | -- | 0.357 | -- |
| 07 | -- | -- | -- | 0.357 | -- |
| 99 | -- | -- | -- | 0.357 | -- |
| 3 90 007 99 | -- | -- | -- | 0.357 | -- |
| 3 90 008 99 | -- | -- | -- | 0.357 | -- |
| 3 90 009 99 | -- | -- | -- | 0.357 | -- |
| 3 90 999 97 | -- | -- | -- | 0.357 | -- |
| 98 | -- | -- | -- | 0.357 | -- |
| 99 | -- | -- | -- | 0.357 | -- |
| 3 99 999 99 | -- | -- | -- | -- | -- |
| 4 01 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 4 01 002 01 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 4 01 999 99 | -- | -- | -- | -- | -- |
| 4 02 001 01 | -- | -- | -- | -- | -- |
| 4 02 003 01 | -- | -- | -- | -- | -- |
| 4 02 004 01 | -- | -- | -- | -- | -- |
| 4 02 005 01 | -- | -- | -- | -- | -- |
| 4 02 006 01 | -- | -- | -- | -- | -- |
| 4 02 999 99 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 4 03 001 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 4 03 002 01 | -- | -- | -- | -- | -- |
| 02 | -- | -- | -- | -- | -- |
| 03 | -- | -- | -- | -- | -- |
| 04 | -- | -- | -- | -- | -- |
| 4 03 999 99 | -- | -- | -- | -- | -- |
| 4 04 001 99 | -- | -- | -- | -- | -- |
| 4 05 001 01 | -- | -- | -- | -- | -- |
| 4 90 999 99 | -- | -- | -- | -- | -- |
| 5 01 001 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 5 01 002 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | -- | 0.357 | 0.357 |
| 5 01 005 05 | -- | -- | -- | -- | -- |
| 06 | 0.321 | -- | -- | 0.357 | 0.357 |
| 07 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 99 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 5 01 900 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 5 03 001 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | -- | -- | -- | -- | -- |
| 04 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 05 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 06 | -- | -- | -- | -- | -- |
| 5 03 002 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 5 03 003 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | -- | -- | -- | -- | -- |
| 5 03 004 01 | 0.321 | -- | -- | 0.357 | 0.357 |
| 5 03 005 06 | 0.321 | -- | -- | 0.357 | 0.357 |
| 99 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 5 03 900 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 07 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 97 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |

TABLE G-5 PRECISION OF UNIT EMISSION FACTORS CO

| Source classification code, SCC | Emission estimate method | | | | |
|---|---|---|---|---|---|
| | Source test | Material balance | NEDS emission factor | Guess | State emission factor |
| 5 01 900 06 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 97 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |
| 5 02 001 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 03 | -- | -- | -- | -- | -- |
| 04 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 05 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 5 02 002 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 5 02 003 01 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 02 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 5 02 005 05 | -- | -- | -- | -- | -- |
| 06 | 0.321 | -- | -- | 0.357 | 0.357 |
| 99 | 0.321 | -- | 0.357 | 0.357 | 0.357 |
| 5 02 900 04 | -- | -- | -- | -- | -- |
| 05 | -- | -- | -- | -- | -- |
| 06 | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- |
| 97 | -- | -- | -- | -- | -- |
| 98 | -- | -- | -- | -- | -- |
| 99 | -- | -- | -- | -- | -- |

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 1 01 001 01 | | 0.09 | 0.02 | | | | | |
| 02 | | 0.09 | 0.02 | | | | | |
| 03 | | 0.09 | 0.02 | | | | | |
| 04 | | 0.09 | 0.02 | | | | | |
| 05 | | 0.09 | 0.02 | | | | | |
| 06 | | 0.09 | 0.02 | | | | | |
| 99 | | 0.09 | 0.02 | | | | | |
| 1 01 002 01 | | 0.09 | 0.02 | | | | | |
| 02 | | 0.09 | 0.02 | | | | | |
| 03 | | 0.09 | 0.02 | | | | | |
| 04 | | 0.09 | 0.02 | | | | | |
| 05 | | 0.09 | 0.02 | | | | | |
| 06 | | 0.09 | 0.02 | | | | | |
| 07 | | 0.09 | 0.02 | | | | | |
| 08 | | 0.09 | 0.02 | | | | | |
| 09 | | 0.09 | 0.02 | | | | | |
| 10 | | 0.09 | 0.02 | | | | | |
| 11 | | 0.09 | 0.02 | | | | | |
| 12 | | 0.09 | 0.02 | | | | | |
| 99 | | 0.09 | 0.02 | | | | | |
| 1 01 003 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 1 01 003 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 07 | | | | | | | | |
| 08 | | | | | | | | |
| 09 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 1 01 004 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 1 01 005 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 1 01 006 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 1 01 007 01 | | | | | | | | |
| 02 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 1 01 007 03 | | | | | | | | |
| 1 01 008 01 | | | | | | | | |
| 1 01 011 02 | | | | | | | | |
| 03 | | | | | | | | |
| 1 01 012 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 1 01 999 97 | | | | | | | | |
| 98 | | | | | | | | |
| 99 | | | | | | | | |
| 1 02 001 01 | | 0.09 | 0.02 | | | | | |
| 02 | | 0.09 | 0.02 | | | | | |
| 03 | | 0.09 | 0.02 | | | | | |
| 04 | | 0.09 | 0.02 | | | | | |
| 05 | | 0.09 | 0.02 | | | | | |
| 06 | | 0.09 | 0.02 | | | | | |
| 07 | | 0.09 | 0.02 | | | | | |
| 99 | | 0.09 | 0.02 | | | | | |
| 1 02 002 01 | | 0.09 | 0.02 | | | | | |
| 02 | | 0.09 | 0.02 | | | | | |
| 03 | | 0.09 | 0.02 | | | | | |
| 04 | | 0.09 | 0.02 | | | | | |
| 05 | | 0.09 | 0.02 | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 1 02 002 06 | | 0.09 | 0.02 | | | | | |
| 07 | | 0.09 | 0.02 | | | | | |
| 08 | | 0.09 | 0.02 | | | | | |
| 09 | | 0.09 | 0.02 | | | | | |
| 10 | | 0.09 | 0.02 | | | | | |
| 11 | | 0.09 | 0.02 | | | | | |
| 12 | | 0.09 | 0.02 | | | | | |
| 13 | | 0.09 | 0.02 | | | | | |
| 14 | | 0.09 | 0.02 | | | | | |
| 99 | | 0.09 | 0.02 | | | | | |
| 1 02 003 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 07 | | | | | | | | |
| 08 | | | | | | | | |
| 09 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 1 02 003 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 1 02 004 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 1 02 005 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 1 02 006 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 1 02 007 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 1 02 008 02 | | | | | | | | |
| 03 | | | | | | | | |
| 1 02 009 02 | | | | | | | | |
| 03 | | | | | | | | |
| 1 02 010 02 | | | | | | | | |
| 03 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | | | | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 1 | 02 | 011 | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| 1 | 02 | 999 | 97 | | | | | | | | |
| | | | 98 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 1 | 03 | 001 | 05 | | 0.09 | 0.02 | | | | | |
| | | | 06 | | 0.09 | 0.02 | | | | | |
| | | | 07 | | 0.09 | 0.02 | | | | | |
| | | | 08 | | 0.09 | 0.02 | | | | | |
| | | | 09 | | 0.09 | 0.02 | | | | | |
| | | | 10 | | 0.09 | 0.02 | | | | | |
| | | | 99 | | 0.09 | 0.02 | | | | | |
| 1 | 03 | 002 | 05 | | 0.09 | 0.02 | | | | | |
| | | | 06 | | 0.09 | 0.02 | | | | | |
| | | | 07 | | 0.09 | 0.02 | | | | | |
| | | | 08 | | 0.09 | 0.02 | | | | | |
| | | | 09 | | 0.09 | 0.02 | | | | | |
| | | | 10 | | 0.09 | 0.02 | | | | | |
| | | | 11 | | 0.09 | 0.02 | | | | | |
| | | | 12 | | 0.09 | 0.02 | | | | | |
| | | | 13 | | 0.09 | 0.02 | | | | | |
| | | | 14 | | 0.09 | 0.02 | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | | | | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 1 | 03 | 002 | 99 | | 0.09 | 0.02 | | | | | |
| 1 | 03 | 003 | 05 | | | | | | | | |
| | | | 06 | | | | | | | | |
| | | | 07 | | | | | | | | |
| | | | 08 | | | | | | | | |
| | | | 09 | | | | | | | | |
| | | | 10 | | | | | | | | |
| | | | 11 | | | | | | | | |
| | | | 12 | | | | | | | | |
| | | | 13 | | | | | | | | |
| | | | 14 | | | | | | | | |
| 1 | 03 | 004 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| 1 | 03 | 005 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| 1 | 03 | 006 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| 1 | 03 | 009 | 03 | | | | | | | | |
| 1 | 03 | 010 | 02 | | | | | | | | |

a) All values are zero unless otherwise noted.

## Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 1 03 010 03 | | | | | | | | |
| 1 03 999 97 | | | | | | | | |
| 98 | | | | | | | | |
| 99 | | | | | | | | |
| 2 01 001 01 | | | | | | | | |
| 2 01 002 01 | | | | | | | | |
| 2 01 003 01 | | | | | | | | |
| 2 01 999 97 | | | | | | | | |
| 98 | | | | | | | | |
| 2 02 001 01 | | | | | | | | |
| 02 | | | | | | | | |
| 2 02 002 01 | | | | | | | | |
| 02 | | | | | | | | |
| 2 02 003 01 | | | | | | | | |
| 2 02 004 01 | | | | | | | | |
| 2 02 999 97 | | | | | | | | |
| 98 | | | | | | | | |
| 2 03 001 01 | | | | | | | | |
| 2 03 999 97 | | | | | | | | |
| 98 | | | | | | | | |
| 2 04 001 01 | | | | | | | | |
| 3 01 001 01 | | | | | | | | |

a) All values are zero unless otherwise noted.

## Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 01 001 99 | | | | | | | | |
| 3 01 002 01 | | | | | | | | |
| 02 | | | | | | | | |
| 3 01 003 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 004 01 | | | | | | | | |
| 59 | | | | | | | | |
| 3 01 005 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 006 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 007 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 008 01 | | | | | | | | |
| 02 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | | | | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 | 01 | 008 | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| | | | 05 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 01 | 009 | 01 | | | | | | | | |
| | | | 10 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 01 | 010 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| | | | 05 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 01 | 011 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 01 | 012 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 01 | 013 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |

a) All values are zero unless otherwise noted.

## Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 01 013 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 07 | | | | | | | | |
| 08 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 014 01 | | | | | | | | |
| 02 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 015 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 05 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 016 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 017 01 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 01 017 99 | | | | | | | | |
| 3 01 018 01 | | | | | | | | |
| 02 | | | | | | | | |
| 05 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 019 03 | | | | | | | | |
| 3 01 020 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 021 01 | | | | | | | | |
| 02 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 022 01 | | | | | | | | |
| 3 01 023 01 | | | | | | | | |
| 04 | | | | | | | | |
| 06 | | | | | | | | |
| 08 | | | | | | | | |
| 10 | | | | | | | | |
| 12 | | | | | | | | |
| 14 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 01 023 16 | | | | | | | | |
| 18 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 024 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 08 | | | | | | | | |
| 10 | | | | | | | | |
| 12 | | | | | | | | |
| 14 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 025 01 | | | | | | | | |
| 05 | | | | | | | | |
| 10 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 026 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 01 026 06 | | | | | | | | |
| 07 | | | | | | | | |
| 08 | | | | | | | | |
| 09 | | | | | | | | |
| 20 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 027 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 3 01 028 01 | | | | | | | | |
| 02 | | | | | | | | |
| 3 01 029 01 | | | | | | | | |
| 02 | | | | | | | | |
| 3 01 030 01 | | | | | | | | |
| 02 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 031 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 01 032 01 | | | | | | | | |
| 02 | | | | | | | | |

a) All values are zero unless otherwise noted.

## Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | | | | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 | 01 | 032 | 03 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 01 | 033 | 01 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 01 | 034 | 01 | | | | | | | | |
| 3 | 01 | 035 | 01 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 01 | 036 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| 3 | 01 | 037 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| 3 | 01 | 038 | 01 | | | | | | | | |
| 3 | 01 | 039 | 01 | | | | | | | | |
| 3 | 01 | 040 | 01 | | | | | | | | |
| 3 | 01 | 050 | 01 | | | | | | | | |
| 3 | 01 | 090 | 99 | | | | | | | | |
| 3 | 01 | 091 | 01 | | | | | | | | |
| 3 | 01 | 100 | 01 | | | | | | | | |
| 3 | 01 | 101 | 01 | | | | | | | | |
| 3 | 01 | 110 | 01 | | | | | | | | |
| 3 | 01 | 900 | 99 | | | | | | | | |
| 3 | 01 | 999 | 99 | | | | | | | | |
| 3 | 02 | 001 | 01 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | | | | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 | 02 | 001 | 99 | | | | | | | | |
| 3 | 02 | 002 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 02 | 003 | 01 | | | | | | | | |
| 3 | 02 | 004 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 02 | 005 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| 3 | 02 | 006 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 02 | 007 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 02 007 05 | | | | | | | | |
| 06 | | | | | | | | |
| 30 | | | | | | | | |
| 99 | | | | | | | | |
| 3 02 008 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 02 009 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 98 | | | | | | | | |
| 99 | | | | | | | | |
| 3 02 010 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 99 | | | | | | | | |
| 3 02 011 01 | | | | | | | | |
| 3 02 012 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 99 | | | | | | | | |
| 3 02 013 01 | | | | | | | | |
| 3 02 014 01 | | | | | | | | |
| 3 02 15 01 | | | | | | | | |

a) All values are zero unless otherwise noted.

## Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 02 015 99 | | | | | | | | |
| 3 02 016 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 02 017 20 | | | | | | | | |
| 99 | | | | | | | | |
| 3 02 018 99 | | | | | | | | |
| 3 02 030 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 02 999 98 | | | | | | | | |
| 99 | | | | | | | | |
| 3 03 000 01 | | | | | | | | |
| 3 03 001 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 99 | | | | | | | | |
| 3 03 002 01 | | | | | | | | |
| 3 03 003 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 03 003 06 | | | | | | | | |
| 99 | | | | | | | | |
| 3 03 004 01 | | | | | | | | |
| 3 03 005 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 99 | | | | | | | | |
| 3 03 006 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 99 | | | | | | | | |
| 3 03 007 01 | | | | | | | | |
| 02 | | | | | | | | |
| 3 03 008 01 | | | | | | | | |
| 02 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table B-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | | | | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 | 03 | 008 | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| | | | 05 | | | | | | | | |
| | | | 06 | | | | | | | | |
| | | | 07 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 03 | 009 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| | | | 05 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 03 | 010 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 03 | 011 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 03 | 012 | 01 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 03 | 013 | 01 | | | | | | | | |
| 3 | 03 | 014 | 01 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 03 014 02 | | | | | | | | |
| 03 | | | | | | | | |
| 99 | | | | | | | | |
| 3 03 030 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 99 | | | | | | | | |
| 3 03 999 99 | | | | | | | | |
| 3 04 001 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 20 | | | | | | | | |
| 50 | | | | | | | | |
| 99 | | | | | | | | |
| 3 04 002 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |

a) All values are zero unless otherwise noted.

## Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_2$ | $NO_2$ | HC | CO |
| 3 04 002 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 3 04 002 99 | | | | | | | | |
| 3 04 003 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 05 | | | | | | | | |
| 30 | | | | | | | | |
| 40 | | | | | | | | |
| 99 | | | | | | | | |
| 3 04 004 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 08 | | | | | | | | |
| 99 | | | | | | | | |
| 3 04 005 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 04 006 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 04 007 01 | | | | | | | | |
| 02 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 04 007 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 99 | | | | | | | | |
| 3 04 008 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 07 | | | | | | | | |
| 08 | | | | | | | | |
| 99 | | | | | | | | |
| 3 04 009 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 04 010 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 04 011 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 04 020 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification codes SCC | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 04 020 99 | | | | | | | | |
| 3 04 050 01 | | | | | | | | |
| 3 04 999 99 | | | | | | | | |
| 3 05 001 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 002 01 | | | | | | | | |
| 02 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 003 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 004 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 005 01 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 05 005 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 006 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 007 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 008 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 009 01 | | | | | | | | |
| 02 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 05 009 03 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 010 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 011 01 | | | | | | | | |
| 20 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 012 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 013 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 014 01 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 99 | | | | | | | | |
| 3 05 015 01 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | | | | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 | 05 | 015 | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 05 | 016 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 05 | 017 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| | | | 05 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 05 | 018 | 01 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 05 | 019 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 05 | 020 | 01 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | | | | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 | 05 | 020 | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| | | | 05 | | | | | | | | |
| | | | 06 | | | | | | | | |
| | | | 07 | | | | | | | | |
| | | | 08 | | | | | | | | |
| | | | 09 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 05 | 021 | 01 | | | | | | | | |
| 3 | 05 | 022 | 01 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 05 | 023 | 01 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 05 | 024 | 01 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 05 | 025 | 01 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 05 | 026 | 01 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 05 | 030 | 99 | | | | | | | | |
| 3 | 05 | 999 | 99 | | | | | | | | |
| 3 | 06 | 001 | 01 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical thruput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 06 001 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 3 06 002 01 | | | | | | | | |
| 3 06 003 01 | | | | | | | | |
| 3 06 004 01 | | | | | | | | |
| 02 | | | | | | | | |
| 3 06 005 01 | | | | | | | | |
| 02 | | | | | | | | |
| 3 06 006 01 | | | | | | | | |
| 02 | | | | | | | | |
| 3 06 007 01 | | | | | | | | |
| 3 06 008 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 3 06 009 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 06 010 01 | | | | | | | | |
| 3 06 011 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 06 012 01 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_2$ | $NO_2$ | HC | CO |
| 3 06 999 98 | | | | | | | | |
| 99 | | | | | | | | |
| 3 07 001 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 07 | | | | | | | | |
| 08 | | | | | | | | |
| 09 | | | | | | | | |
| 99 | | | | | | | | |
| 3 07 002 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 99 | | | | | | | | |
| 3 07 004 01 | | | | | | | | |
| 02 | | | | | | | | |
| 99 | | | | | | | | |
| 3 07 005 01 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table M-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 3 07 005 99 | | | | | | | | |
| 3 07 006 01 | | | | | | | | |
| 3 07 007 01 | | | | | | | | |
| 02 | | | | | | | | |
| 99 | | | | | | | | |
| 3 07 008 99 | | | | | | | | |
| 3 07 009 99 | | | | | | | | |
| 3 07 010 99 | | | | | | | | |
| 3 07 020 99 | | | | | | | | |
| 3 07 999 99 | | | | | | | | |
| 3 09 001 01 | | | | | | | | |
| 02 | | | | | | | | |
| 99 | | | | | | | | |
| 3 09 010 99 | | | | | | | | |
| 3 09 020 99 | | | | | | | | |
| 3 09 999 99 | | | | | | | | |
| 3 20 999 99 | | | | | | | | |
| 3 30 001 01 | | | | | | | | |
| 99 | | | | | | | | |
| 3 30 002 99 | | | | | | | | |
| 3 30 003 99 | | | | | | | | |
| 3 90 001 99 | | 0.09 | 0.02 | | | | | |
| 3 90 002 01 | | 0.09 | 0.02 | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_2$ | $NO_x$ | HC | CO |
| 3 90 002 06 | | 0.09 | 0.02 | | | | | |
| 07 | | 0.09 | 0.02 | | | | | |
| 08 | | 0.09 | 0.02 | | | | | |
| 99 | | 0.09 | 0.02 | | | | | |
| 3 90 004 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 07 | | | | | | | | |
| 99 | | | | | | | | |
| 3 90 005 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 07 | | | | | | | | |
| 99 | | | | | | | | |
| 3 90 006 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | | | | Typical throughput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ash | Sulfur | Part. | $SO_2$ | $NO_x$ | HC | CO |
| 3 | 90 | 006 | 04 | | | | | | | | |
| | | | 05 | | | | | | | | |
| | | | 06 | | | | | | | | |
| | | | 07 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 90 | 007 | 99 | | | | | | | | |
| 3 | 90 | 008 | 99 | | | | | | | | |
| 3 | 90 | 009 | 99 | | | | | | | | |
| 3 | 90 | 999 | 97 | | | | | | | | |
| | | | 98 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 3 | 99 | 999 | 99 | | | | | | | | |
| 4 | 01 | 001 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| 4 | 01 | 002 | 01 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 4 | 01 | 999 | 99 | | | | | | | | |
| 4 | 02 | 001 | 01 | | | | | | | | |
| 4 | 02 | 003 | 01 | | | | | | | | |
| 4 | 02 | 004 | 01 | | | | | | | | |
| 4 | 02 | 005 | 01 | | | | | | | | |
| 4 | 02 | 006 | 01 | | | | | | | | |
| 4 | 02 | 999 | 99 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | | | | Typical throput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 4 | 03 | 001 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| 4 | 03 | 002 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| 4 | 03 | 999 | 99 | | | | | | | | |
| 4 | 04 | 001 | 99 | | | | | | | | |
| 4 | 05 | 001 | 01 | | | | | | | | |
| 4 | 90 | 999 | 99 | | | | | | | | |
| 5 | 01 | 001 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| 5 | 01 | 002 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| 5 | 01 | 005 | 05 | | | | | | | | |
| | | | 06 | | | | | | | | |
| | | | 07 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 5 | 01 | 900 | 04 | | | | | | | | |
| | | | 05 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table H-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | Typical throughput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ash | Sulfur | Part. | $SO_x$ | $NO_x$ | HC | CO |
| 5 01 900 06 | | | | | | | | |
| 10 | | | | | | | | |
| 97 | | | | | | | | |
| 98 | | | | | | | | |
| 99 | | | | | | | | |
| 5 02 001 01 | | | | | | | | |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 5 02 002 01 | | | | | | | | |
| 5 02 003 01 | | | | | | | | |
| 02 | | | | | | | | |
| 5 02 005 05 | | | | | | | | |
| 06 | | | | | | | | |
| 99 | | | | | | | | |
| 5 02 900 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |
| 10 | | | | | | | | |
| 97 | | | | | | | | |
| 98 | | | | | | | | |
| 99 | | | | | | | | |

a) All values are zero unless otherwise noted.

Table B-1 TYPICAL VALUES FOR AVERAGE SCC PROCESSES[a]

| Source classification code SCC | | | | Typical throughput | Typical ash and sulfur content | | Typical control efficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Ash | Sulfur | Part. | $SO_2$ | $NO_x$ | HC | CO |
| 5 | 03 | 001 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| | | | 04 | | | | | | | | |
| | | | 05 | | | | | | | | |
| | | | 06 | | | | | | | | |
| 5 | 03 | 002 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| | | | 03 | | | | | | | | |
| 5 | 03 | 003 | 01 | | | | | | | | |
| | | | 02 | | | | | | | | |
| 5 | 03 | 004 | 01 | | | | | | | | |
| 5 | 03 | 005 | 06 | | | | | | | | |
| | | | 99 | | | | | | | | |
| 5 | 03 | 900 | 04 | | | | | | | | |
| | | | 05 | | | | | | | | |
| | | | 06 | | | | | | | | |
| | | | 07 | | | | | | | | |
| | | | 10 | | | | | | | | |
| | | | 97 | | | | | | | | |
| | | | 98 | | | | | | | | |
| | | | 99 | | | | | | | | |

a) All values are zero unless otherwise noted.

# APPENDIX I

## POINT SOURCE DATA USED TO DEVELOP PRECISION OF EMISSION FACTORS

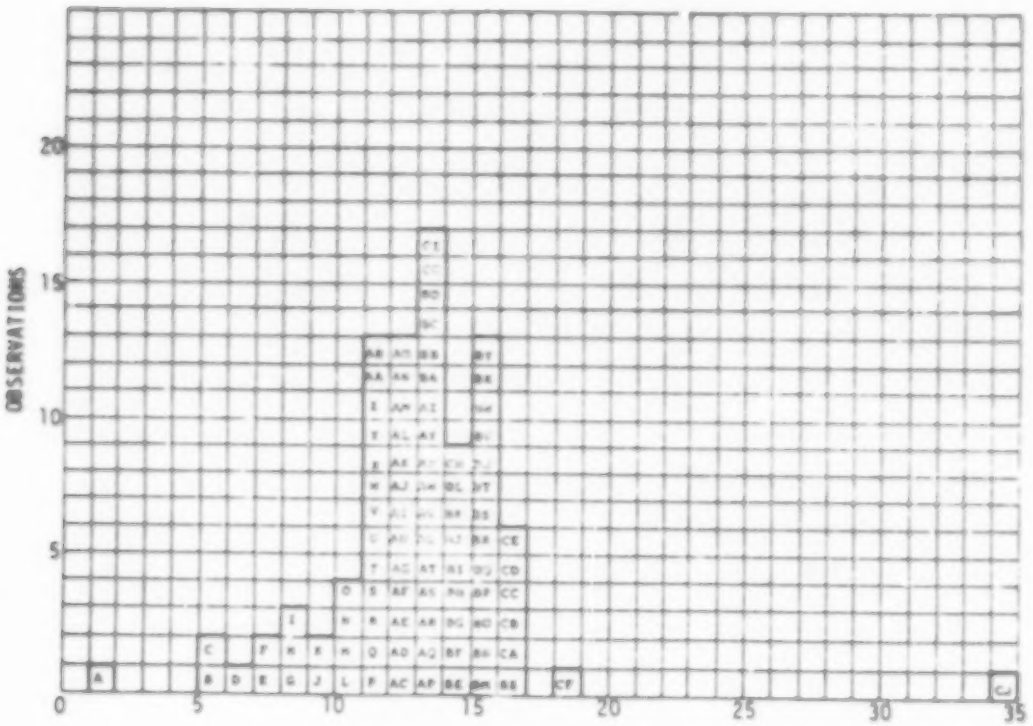
An emission factor is essentially an average of several observations of emissions from a specific process. Therefore, in order to calculate the precision of an emission factor, it was necessary to obtain all the emission values used in calculating the emission factor. A literature search was made to obtain all the references used in calculating the emission factors for the priority process - pollutants (see Table 2.1). Some of the references listed in Reference 30 (AP-42) could not be obtained and others either contained no values or were not applicable. The majority of the references, however, contained emission observations.

This appendix lists all obtainable emission observations that were used in calculating the emission factors for the priority process - pollutants, the reference from which these values were obtained, the references that were not available, and the references that either had no emission values or values that were not applicable. A graphical presentation is also given for each priority emission factor showing the distribution of the various applicable observations.

Emission Factor 13A lb/ton

Pollutant Particulate from Pulverized wet bottom, boiler (Bituminous coal)

AP-42 Pg. No. 1.1-4




OBSERVED VALUE, lb/ton XA

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 1.5 A |
| B | 1 | 5.5 A |
| C | 1 | 5.5 A |
| D | 1 | 6.5 A |
| E | 1 | 7.5 A |
| F | 1 | 7.5 A |
| G | 1 | 8.5 A |
| H | 1 | 8.5 A |

Emission Factor 13A lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| I | 1 | 8.5 A |
| J | 1 | 9.5 A |
| K | 1 | 9.5 A |
| L | 1 | 10.5 A |
| M | 1 | 10.5 A |
| N | 1 | 10.5 A |
| O | 1 | 10.5 A |
| P | 1 | 11.5 A |
| Q | 1 | 11.5 A |
| R | 1 | 11.5 A |
| S | 1 | 11.5 A |
| T | 1 | 11.5 A |
| U | 1 | 11.5 A |
| V | 1 | 11.5 A |
| W | 1 | 11.5 A |
| X | 1 | 11.5 A |
| Y | 1 | 11.5 A |
| Z | 1 | 11.5 A |
| AA | 1 | 11.5 A |
| AB | 1 | 12.0 A |
| AC | 1 | 12.5 A |
| AD | 1 | 12.5 A |
| AE | 1 | 12.5 A |
| AF | 1 | 12.5 A |

Emission Factor 13A lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| AG | 1 | 12.5 A |
| AH | 1 | 12.5 A |
| AI | 1 | 12.5 A |
| AJ | 1 | 12.5 A |
| AK | 1 | 12.5 A |
| AL | 1 | 12.5 A |
| AM | 1 | 12.5 A |
| AN | 1 | 12.5 A |
| AO | 1 | 13.0 A |
| AP | 1 | 13.5 A |
| AQ | 1 | 13.5 A |
| AR | 1 | 13.5 A |
| AS | 1 | 13.5 A |
| AT | 1 | 13.5 A |
| AU | 1 | 13.5 A |
| AV | 1 | 13.5 A |
| AW | 1 | 13.5 A |
| AX | 1 | 13.5 A |
| AY | 1 | 13.5 A |
| AZ | 1 | 13.5 A |
| BA | 1 | 13.5 A |
| BB | 1 | 13.5 A |
| BC | 1 | 13.5 A |
| BD | 1 | 14.0 A |
| BE | 1 | 14.5 A |

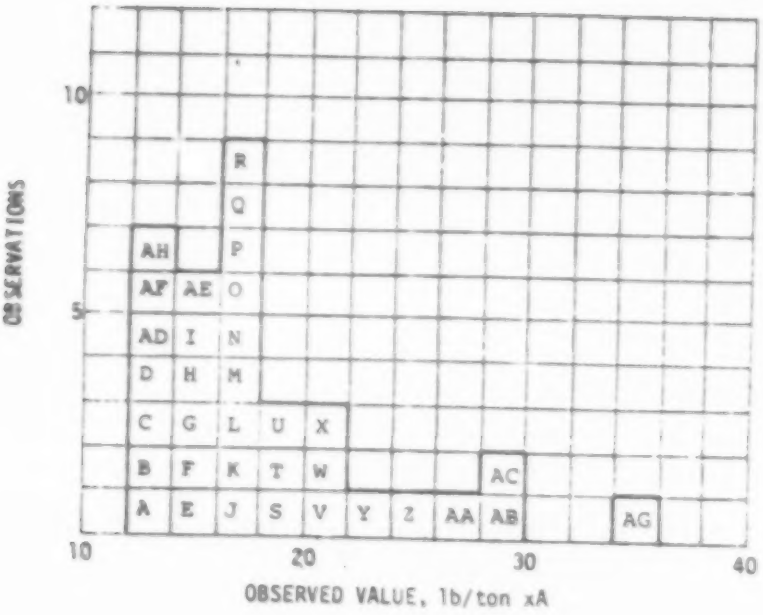
Emission Factor 13A lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| BF | 1 | 14.5 A |
| BG | 1 | 14.5 A |
| BH | 1 | 14.5 A |
| BI | 1 | 14.5 A |
| BJ | 1 | 14.5 A |
| BK | 1 | 14.5 A |
| BL | 1 | 15.0 A |
| BM | 1 | 15.5 A |
| BN | 1 | 15.5 A |
| BO | 1 | 15.5 A |
| BP | 1 | 15.5 A |
| BQ | 1 | 15.5 A |
| BR | 1 | 15.5 A |
| BS | 1 | 15.5 A |
| BT | 1 | 15.5 A |
| BU | 1 | 15.5 A |
| BV | 1 | 15.5 A |
| BW | 1 | 15.5 A |
| BX | 1 | 15.5 A |
| BY | 1 | 15.5 A |
| BZ | 1 | 16.5 A |
| CA | 1 | 16.5 A |
| CB | 1 | 16.5 A |
| CC | 1 | 16.5 A |

Emission Factor 13A lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| CD | 1 | 16.5 A |
| CE | 1 | 16.5 A |
| CF | 1 | 18.5 A |
| | 3 | 70-240 (No ash content given) |
| | 4 | factors for general category of "electrical generation" only |
| CG | 5 | 13.7 A |
| CH | 5 | 14.5 A |
| CI | 5 | 14.0 A |
| CJ | 6 | No definite emission factors |
| | 7 | 14.0 A emission factors are not a function of ash content; also, dry and slag units not distinguished from one another. |

Emission Factor 17A lb/ton
Particulate from pulverize
Pollutant dry bottom boiler (Bitumi-
inous coal)
AP-42 Pg. No. 1.1-4




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 12.5 A |
| B | 1 | 12.5 A |
| C | 1 | 12.5 A |
| D | 1 | 13.5 A |
| E | 1 | 14.5 A |
| F | 1 | 14.5 A |
| G | 1 | 15.5 A |
| H | 1 | 15.5 A |

Emission Factor 17A lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| I | 1 | 15.5 A |
| J | 1 | 16.5 A |
| K | 1 | 16.5 A |
| L | 1 | 16.5 A |
| M | 1 | 16.5 A |
| N | 1 | 17.5 A |
| O | 1 | 17.5 A |
| P | 1 | 17.5 A |
| Q | 1 | 17.5 A |
| R | 1 | 18.0 A |
| S | 1 | 18.5 A |
| T | 1 | 18.5 A |
| U | 1 | 19.5 A |
| V | 1 | 20.5 A |
| W | 1 | 20.5 A |
| X | 1 | 21.5 A |
| Y | 1 | 22.5 A |
| Z | 1 | 25.5 A |
| AA | 1 | 26.5 A |
| AB | 1 | 28.5 A |
| AC | 1 | 29.5 A |
| | 3 | 70-240 (No ash content given) |
| | 4 | factor for general category of "electric generation only |

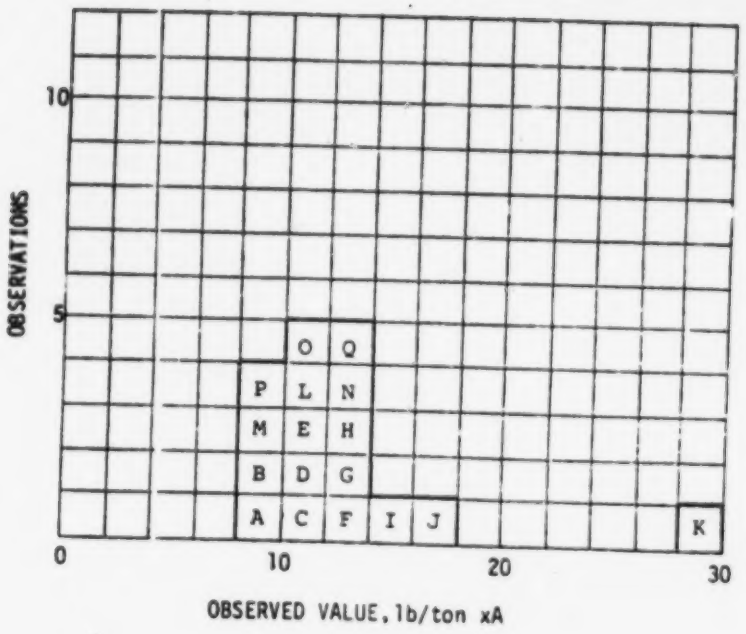
Emission Factor 17A lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| AD | 5 | 13.7 A |
| AE | 5 | 14.5 A |
| AF | 5 | 14.0 A |
| AG | 5 | 34.1 A |
| | 6 | no definite emission factor |
| AH | 7 | 14 A emission factors are not a function of ash content; also, dry and slag units not distinguished from one another. |

Emission Factor 13A lb/ton (W/O fly-ash

Pollutant (10-100) MM BTU/HR rein) Particulate from spreader stoker (Bituminous Coal)

AP-42 Pg. No. 1.1-4




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 9.5 A |
| B | 1 | 9.5 A |
| C | 1 | 10.5 A |
| D | 1 | 12.0 A |
| E | 1 | 12.0 A |
| F | 1 | 12.5 A |
| G | 1 | 13.5 A |
| H | 1 | 14.0 A |

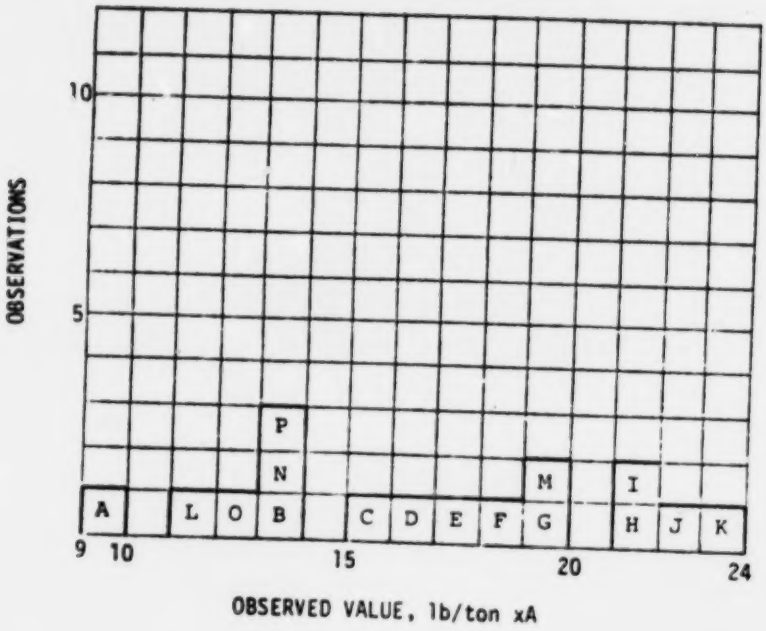
Emission Factor 13A lb/ton (continued)
(W/O fly-ash reinjection)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| I | 1 | 14.5 A |
| J | 1 | 18.0 A |
| K | 1 | 29.6 A |
| | 4 | factors for general category of "electric generation" only |
| | 7 | emissions factors are not a function of ash content |
| L | 8 | 12.0 A; but for all types of coal-fired facilities |
| M | 9 | 10.0 A |
| N | 9 | 14.0 A |
| O | 9 | 12.0 A |
| P | 9 | 9.4 A |
| Q | 9 | 12.4 A |

Emission Factor 20 lb/ton ash rein) (with fly-

Pollutant (10-100) MM BTU/HR Particulate from spreader stoker (Bituminous Coal)

AP-42 Pg. No. 1.1-4

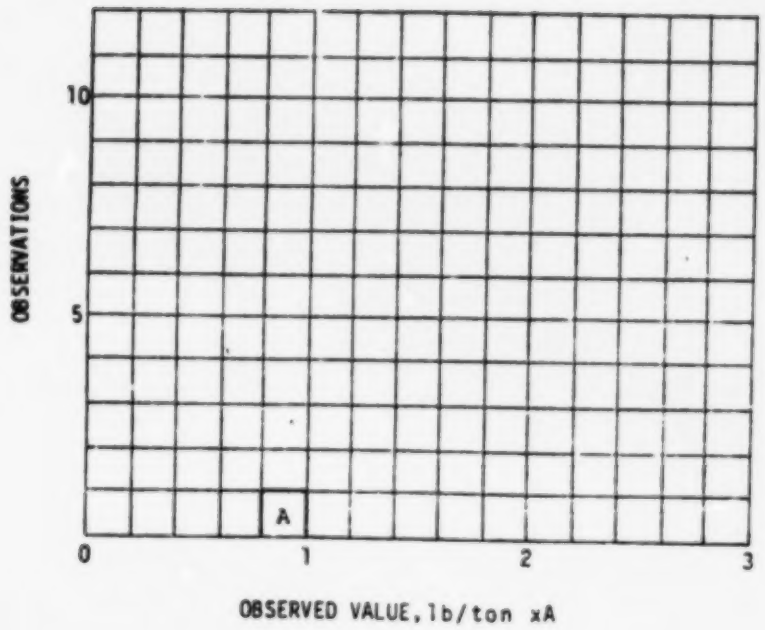



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 9.5 A |
| B | 1 | 13.5 A |
| C | 1 | 15.5 A |
| D | 1 | 16.5 A |
| E | 1 | 18.0 A |
| F | 1 | 18.5 A |
| G | 1 | 19.5 A |
| H | 1 | 21.5 A |

Emission Factor 20 lb/ton (continued)
(with fly-ash reinjection

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| I | 1 | 22.0 A |
| J | 1 | 22.5 A |
| K | 1 | 23.5 A |
| | 4 | factors for general category of "electric generation" only |
| | 7 | emission factors are not a function of ash content |
| L | 8 | 12.0 A; but for all types of coal fired facilities |
| M | 9 | 20.0 A |
| N | 9 | 13.2 A |
| O | 9 | 12.6 A |
| P | 9 | 13.2 A |

Emission Factor 2A lb/ton
<10x10$^6$ BTU/HR
Pollutant Particulate from spreader stoker (Bituminous Coal)
AP-42 Pg. No. 1.1-4

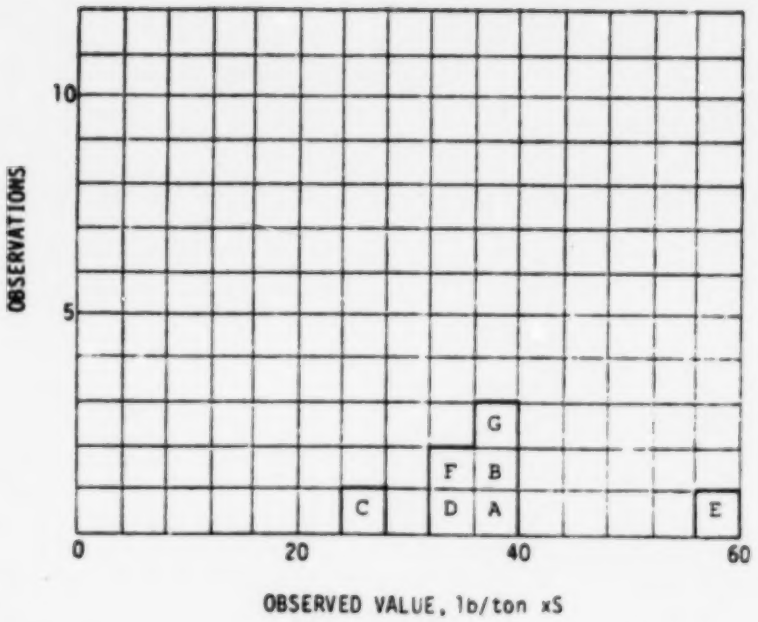



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 7 | Emission factor not shown as function of ash content |
| A | 9 | 1A |
| | 10 | reference not available |

Emission Factor 38 S lb/ton

Pollutant $SO_x$ from pulverized wet bottom, boiler (Bituminous Coal)

AP-42 Pg. No. 1.1-4




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 38S; 95% of S goes to $SO_x$ |
| B | 3 | (14-62) S; avg. = 38S |
| | 4 | emission factor not a function of sulfur content |
| C | 5 | 24.5 S |
| D | 5 | 35.3 S |
| E | 5 | 56.9 S |

Emission Factor 38 S lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| F | 5 | 36.6 S |
| G | 6 | 38.7 S; but for all units |
| | 7 | deals only with dry bottom. |

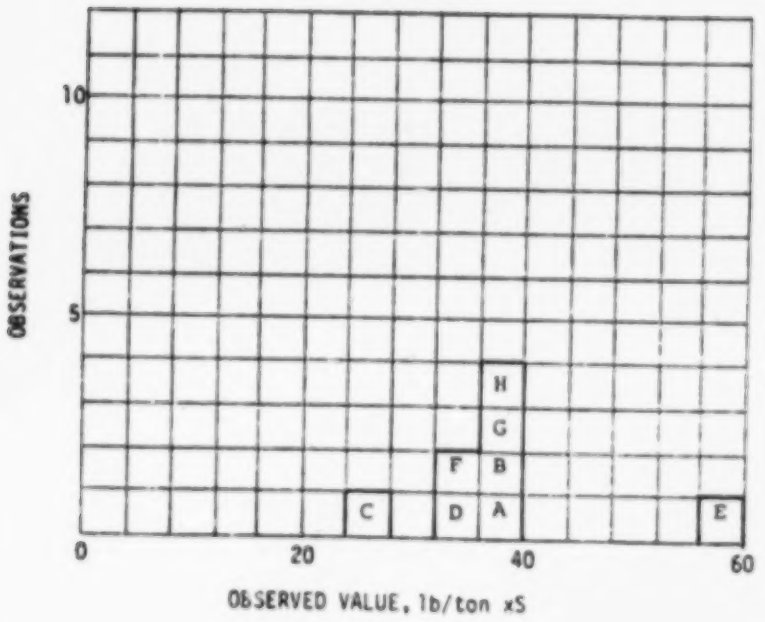
$S = (\text{max.} - \text{min.})/d_2 = (56.9 - 24.5)/2.70 = 12.00$

$\bar{X} = \frac{306.0}{8} = 38.25$

Emission Factor 38 S lb/ton $SO_x$ from pulverized dry bottom boiler (Bituminous coal)

Pollutant

AP-42 Pg. No. 1.1-4




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 38S ; 95% of S goes to $SO_x$ |
| B | 3 | (14-62) S; avg = 38S |
| | 4 | emission factor not a function of sulfur content |
| C | 5 | 24.5S |
| D | 5 | 35.3S |
| E | 5 | 56.9S |

Emission Factor 185 lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| F | 5 | 36.6S |
| G | 5 | 38.7S; but for all units |
| H | 5 | 38.3S |

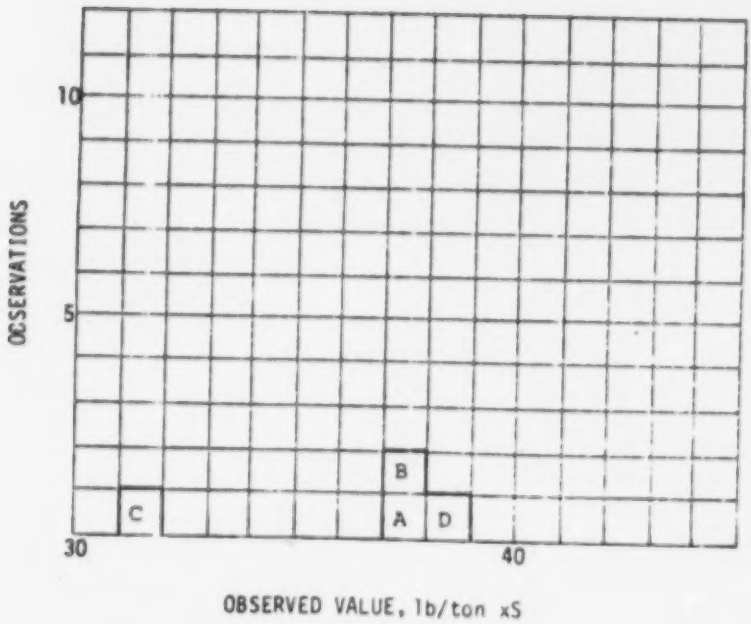
$S = (\text{max.} - \text{min.})/d_2 = (56.9 - 24.5)/2.85 = 11.37$

$\bar{X} = \frac{344.3}{9} = 38.26$

Emission Factor 38S lb/ton

Pollutant $SO_x$ from cyclone boiler (Bituminous Coal)

AP-42 Pg. No. 1.1-4




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 38S; 95% of S goes to $SO_x$ |
| B | 3 | (14-62)S; avg = 38S |
| | 4 | emission factor not a function of sulfur content |
| C | 5 | 31.9S |
| D | 6 | 38.7S |

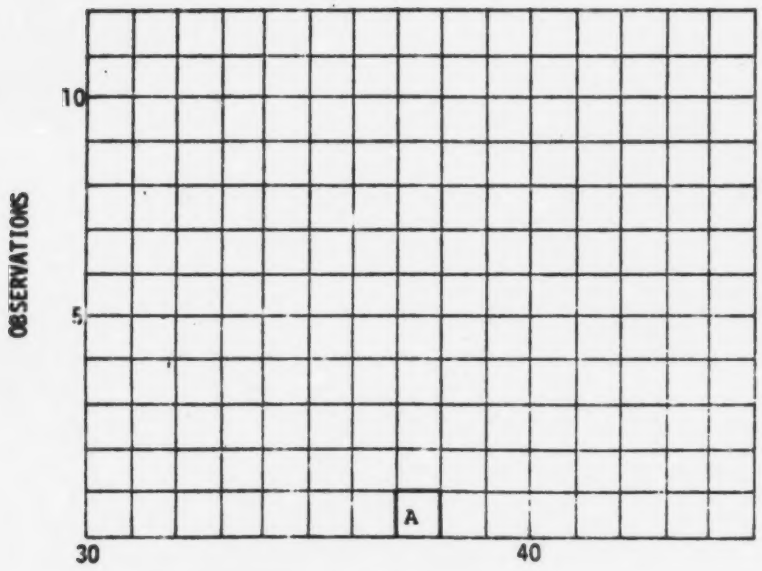
Emission Factor 38S lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 7 | none investigated |

$S = (\text{max.} - \text{min.})/d_2 = (38.7-31.9)/2.06 = 3.3$

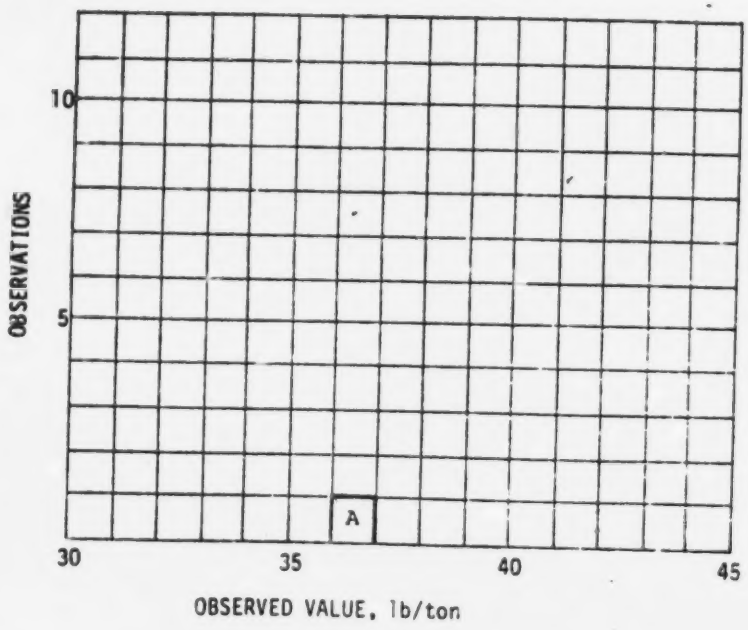
$\bar{X} = \frac{184.6}{5} = 36.92\ S$

Emission Factor 38S lb/ton
10-100 MM BTU/HR
Pollutant $SO_x$ from spreader stokers
(Bituminous Coal)
AP-42 Pg. No. 1.1-4



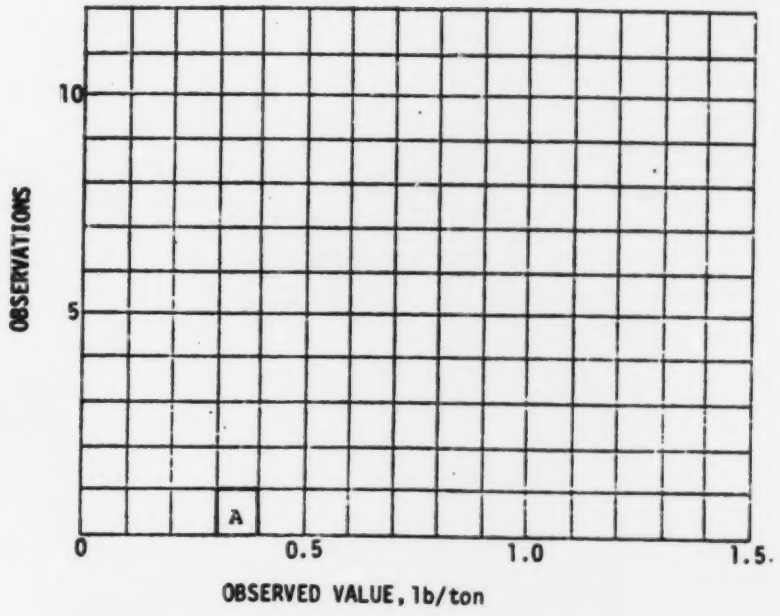

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 38S |
| | 4 | given emission factor not a function of sulfur content |

Emission Factor 38S lb/ton
Pollutant 10MM BTU/HR $SO_x$ from spreader stoker boiler (Bituminous Coal)
AP-42 Pg. No. 1.1-3




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 7 | none |
| A | 9 | 36.8 S |
| | 10 | reference not available |

Emission Factor 6 lb/ton
(<10 MM Btu/Hr $NO_x$ from)
Pollutant spreader stoker boiler
(Bituminous Coal)
AP-42 Pg. No. 1.1-3

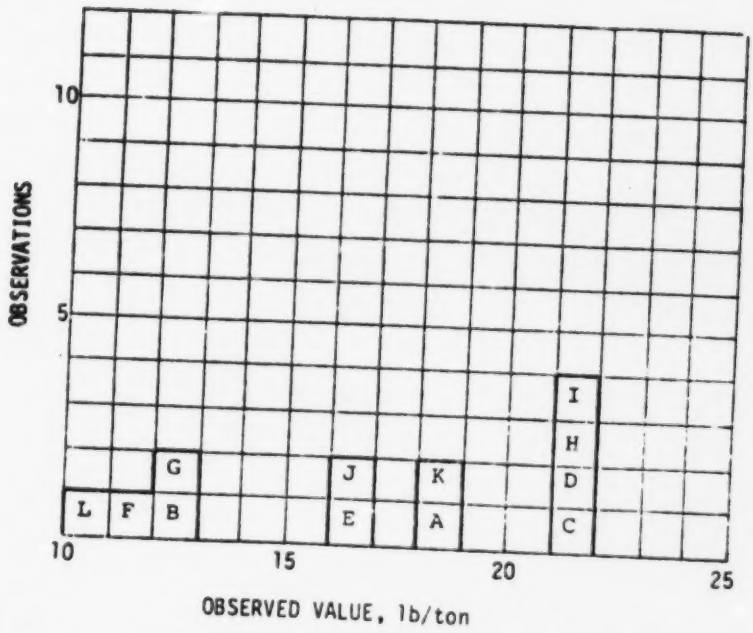



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 7 | none |
| A | 9 | 0.4 |
| | 10 | reference not available |

Emission Factor 18 lb/ton

Pollutant $NO_x$ from pulverized, dry bottom, boiler (Bituminous coal)

AP-42 Pg. No. 1.1-4




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 18.33 spreader stroke |
| B | 1 | 12.90 vertical |
| C | 1 | 21.58 corner |
| D | 1 | 21.19 front wall |
| E | 1 | 16.12 horizontal |
| F | 3 | (3-20); avg. 11.15 |
| | 4 | type of coal not specified |

Emission Factor 18 lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| G | 5 | 12.09 vertical |
| H | 5 | 21.58 corner |
| I | 5 | 21.19 front wall |
| J | 5 | 16.12 horizontal |
| K | 5 | 18.33 spreader |
| | 6 | (4.1-60)[b] |
| L | 7 | 11.0 |

$S = (\text{max.}-\text{min})/d_2 = (21.58-11.0)/3.258 = 3.25$[c]

$\bar{X} = \frac{212.62}{13} = 16.36$[c]

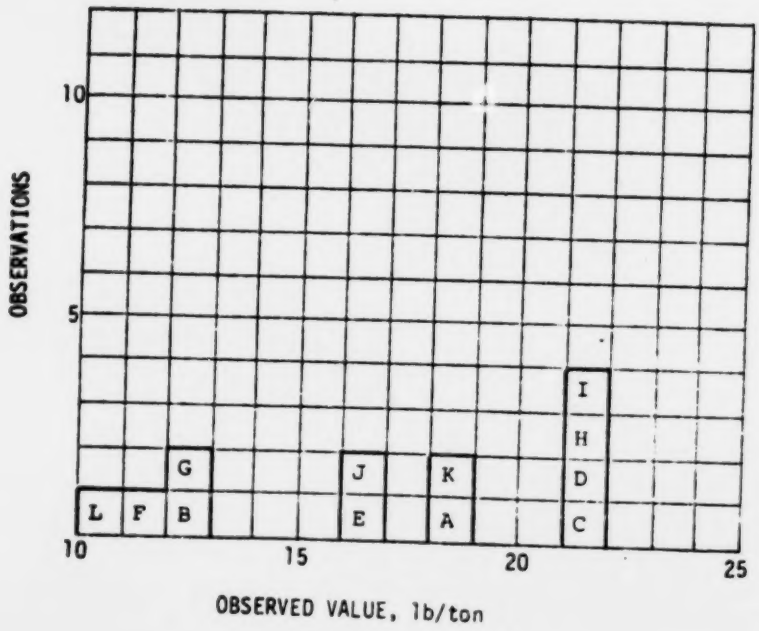
b) Data not designating load a type of unit. This observation from reference (6) is found in "Air Pollutant Emission Factors, Final report" Resources Research, Inc. Contract Number CPA 22-69-119, April, 1970.

c) In calculating the standard deviation and the mean, the observation from reference (6) is not used since the load and unit type are not known.

Emission Factor 30 lb/ton

Pollutant $NO_x$ from pulverized, wet botton, boiler (Bituminous coal)

AP-42 Pg. No. 1.1-4




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 12.09 vertical |
| B | 1 | 21.58 corner |
| C | 1 | 21.19 front wall |
| D | 1 | 16.12 horizontal |
| E | 1 | 18.33 spreader |
| F | 3 | (3-20) avg. 11.5 |
| | 4 | type of coal not specified |
| G | 5 | 12.09 vertical |

Emission Factor 30 lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| H | 5 | 21.58 corner |
| I | 5 | 21.19 front wall |
| J | 5 | 16.12 horizontal |
| K | 5 | 18.33 spreader |
| | 6 | inadequate material |
| L | 7 | 11.0 |

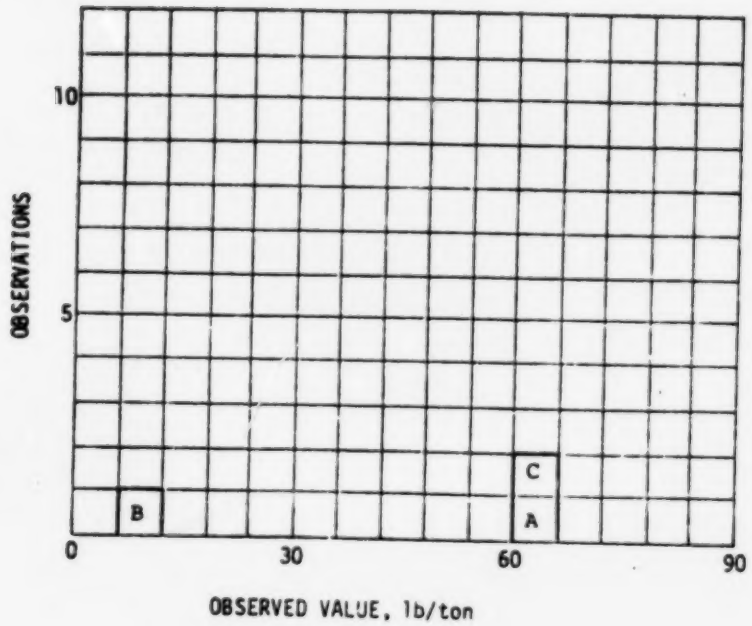
$S = (\text{max.}-\text{min.})/d_2 = (21.58-11.0)/3.258 = 3.25$

$\bar{X} = \frac{212.62}{13} = 16.36$

Emission Factor 55 lb/ton

Pollutant $NO_x$ from cyclone boiler (Bituminous Coal)

AP-42 Pg. No. 1.1-4




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 61.1 |
| B | 3 | (3.20); avg. = 11.5 |
| | 4 | type of coal not specified |
| C | 5 | 61.1 |
| | 6 | (4.1-60)[b] |
| | 7 | does not apply |

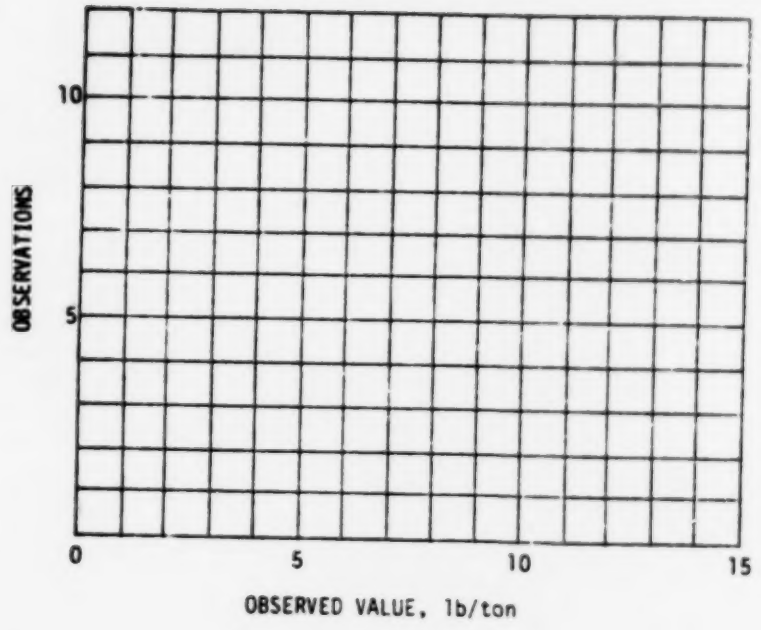
$S = (\text{max.}-\text{min})/d_2 = (61.1-11.5)/1.69 = 29.35$

Emission Factor 55 lb/ton (continued)

$\bar{X} = \frac{145.2}{4} = 36.3$

b) Data not designating load or type of unit. This data from reference (6) has been taken from "Air Pollutant Emission Factors Final Report " Contract Number CPA 22-69-119.

Emission Factor 15 lb/ton
(10-100) MM BTU/HR $NO_x$
Pollutant from spreader stoker boiler (Bituminous Coal)
AP-42 Pg. No. 1.1-3



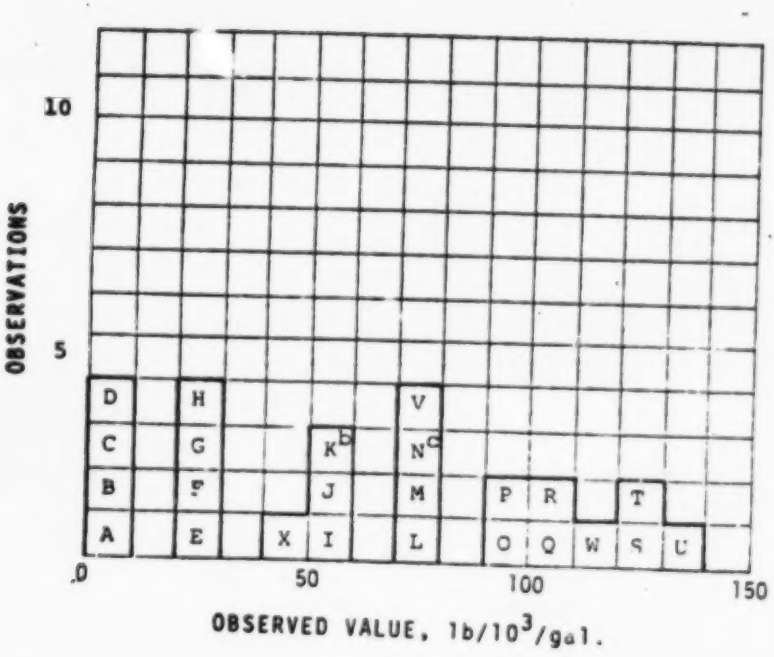

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 1 | none |
| | 4 | none |
| | 7 | none |
| | 8 | none |
| | 9 | none |

Industrial & Commercial

Emission Factor (40 to 80) lb/$10^3$ gal

Pollutant $NO_x$ from residual oil combustion

AP-42 Pg. No. 1.3-2




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 2 | 8.2 |
| B | 2 | 8.2 |
| C | 2 | 8.2 |
| D | 2 | 8.2 |
| E | 2 | 24.6 |
| F | 2 | 24.6 |
| G | 2 | 24.6 |
| H | 2 | 24.6 |

Emission Factor (40 to 80) $lb/10^3 gal$ (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| I | 2 | 57.4 |
| J | 2 | 57.4 |
| K | 2 | [illegible].4[b] |
| L | 2 | 73.8 |
| M | 2 | 73.8 |
| N | 2 | 73.8[c] |
| O | 2 | 90.2 |
| P | 2 | 90.2 |
| Q | 2 | 106.6 |
| R | 2 | 106.6 |
| S | 2 | 123.0 |
| T | 2 | 123.0 |
| U | 2 | 139.4 |
| V | 3 | 80.0 |
| | 4 | not specific |
| | 5 | ref. not available |
| | 6 | not applicable |
| | 9 | distillate oil only |
| | 10 | distillate oil only |
| | 12 | ref. not available |
| | 13 | ref. not available |
| W | 15 | 118.0 |
| X | 15 | 41.0 |
| | 16 | not stated |

$\Sigma x^2 = 1.8223395 \times 10^9$

$\bar{X} = 72.05$

b) represents 50 tests on small sources.

Emission Factor (40 to 80) lb/$10^3$ gal (continued)

$S_{\bar{X}}$ = 5.07

P = 0.00289

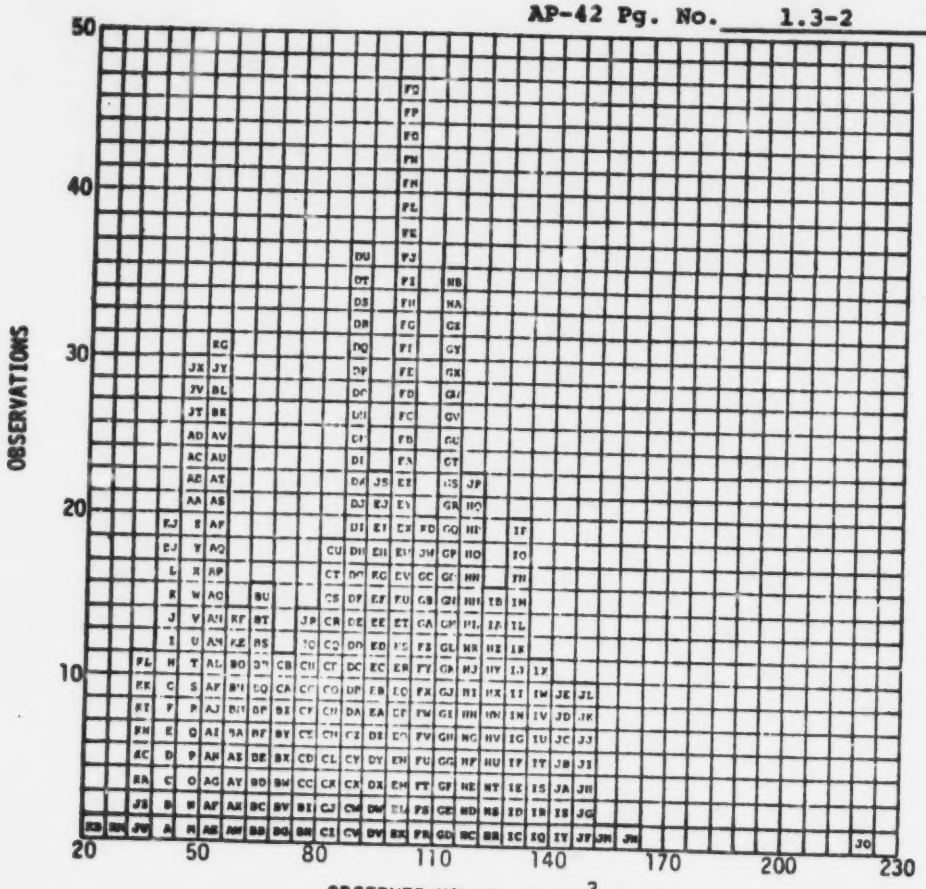
c) represents 519 tests

Power Plant

Emission Factor 105 lb/$10^3$ gal

Pollutant $NO_x$ from Residual Oil Combustion

AP-42 Pg. No. 1.3-2




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 2 | 39.4 |
| B | 2 | 39.4 |
| C | 2 | 43.34 |
| D | 2 | 43.34 |
| E | 2 | 43.34 |
| F | 2 | 43.34 |
| G | 2 | 43.34 |

Emission Factor 105 lb/$10^3$gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| H | 2 | 43.34 |
| I | 2 | 43.34 |
| J | 2 | 43.34 |
| K | 2 | 43.34 |
| L | 2 | 43.34 |
| M | 2 | 47.28 |
| N | 2 | 47.28 |
| O | 2 | 47.28 |
| P | 2 | 47.28 |
| Q | 2 | 47.28 |
| R | 2 | 47.28 |
| S | 2 | 47.28 |
| T | 2 | 47.28 |
| U | 2 | 47.28 |
| V | 2 | 47.28 |
| W | 2 | 47.28 |
| X | 2 | 47.28 |
| Y | 2 | 47.28 |
| Z | 2 | 47.28 |
| AA | 2 | 47.28 |
| AB | 2 | 47.28 |
| AC | 2 | 47.28 |
| AD | 2 | 47.28 |
| AE | 2 | 51.22 |
| AF | 2 | 51.22 |

Emission Factor 105 lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| AG | 2 | 51.22 |
| AH | 2 | 51.22 |
| AI | 2 | 51.22 |
| AJ | 2 | 51.22 |
| AK | 2 | 51.22 |
| AL | 2 | 51.22 |
| AM | 2 | 51.22 |
| AN | 2 | 51.22 |
| AO | 2 | 55.16 |
| AP | 2 | 55.16 |
| AQ | 2 | 55.16 |
| AR | 2 | 55.16 |
| AS | 2 | 55.16 |
| AT | 2 | 55.16 |
| AU | 2 | 55.16 |
| AV | 2 | 55.16 |
| AW | 2 | 59.10 |
| AX | 2 | 59.10 |
| AY | 2 | 59.10 |
| AZ | 2 | 59.10 |
| BA | 2 | 59.10 |
| BB | 2 | 63.04 |
| BC | 2 | 63.04 |
| BD | 2 | 65.01 |

Emission Factor 105 lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| BE | 2 | 66.98 |
| BF | 2 | 66.98 |
| BG | 2 | 70.92 |
| BH | 2 | 74.86 |
| BI | 2 | 78.80 |
| BJ | 2 | 39.40 |
| BK | 2 | 55.16 |
| BL | 2 | 55.16 |
| BM | 2 | 59.10 |
| BN | 2 | 59.10 |
| BO | 2 | 59.10 |
| BP | 2 | 66.98 |
| BQ | 2 | 66.98 |
| BR | 2 | 66.98 |
| BS | 2 | 66.98 |
| BT | 2 | 66.98 |
| BU | 2 | 66.98 |
| BV | 2 | 70.92 |
| BW | 2 | 70.92 |
| BX | 2 | 70.92 |
| BY | 2 | 70.92 |
| BZ | 2 | 70.92 |
| CA | 2 | 70.92 |
| CB | 2 | 70.92 |

Emission Factor 105 lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| CC | 2 | 78.80 |
| CD | 2 | 78.80 |
| CE | 2 | 78.80 |
| CF | 2 | 78.80 |
| CG | 2 | 78.80 |
| CH | 2 | 78.80 |
| CI | 2 | 82.74 |
| CJ | 2 | 82.74 |
| CK | 2 | 82.74 |
| CL | 2 | 82.74 |
| CM | 2 | 82.74 |
| CN | 2 | 82.74 |
| CO | 2 | 82.74 |
| CP | 2 | 82.74 |
| CQ | 2 | 82.74 |
| CR | 2 | 82.74 |
| CS | 2 | 82.74 |
| CT | 2 | 82.74 |
| CU | 2 | 82.74 |
| CV | 2 | 86.68 |
| CW | 2 | 86.68 |
| CX | 2 | 86.68 |
| CY | 2 | 86.68 |
| CZ | 2 | 86.68 |
| DA | 2 | 86.68 |
| DB | 2 | 86.68 |

Emission Factor 105 lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| DC | 2 | 86.68 |
| DD | 2 | 86.68 |
| DE | 2 | 86.68 |
| DF | 2 | 86.68 |
| DG | 2 | 86.68 |
| DH | 2 | 86.68 |
| DI | 2 | 86.68 |
| DJ | 2 | 86.68 |
| DK | 2 | 90.62 |
| DL | 2 | 90.62 |
| DM | 2 | 90.62 |
| DN | 2 | 90.62 |
| DO | 2 | 90.62 |
| DP | 2 | 90.62 |
| DQ | 2 | 90.62 |
| DR | 2 | 90.62 |
| DS | 2 | 90.62 |
| DT | 2 | 90.62 |
| DU | 2 | 90.62 |
| DV | 2 | 94.56 |
| DW | 2 | 94.56 |
| DX | 2 | 94.56 |
| DY | 2 | 94.56 |
| DZ | 2 | 94.56 |
| EA | 2 | 94.56 |

Emission Factor 105 lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| EB | 2 | 94.56 |
| EC | 2 | 94.56 |
| ED | 2 | 94.56 |
| EE | 2 | 94.56 |
| EF | 2 | 94.56 |
| EG | 2 | 94.56 |
| EH | 2 | 94.56 |
| EI | 2 | 94.56 |
| EJ | 2 | 94.56 |
| EK | 2 | 98.50 |
| EL | 2 | 98.50 |
| EM | 2 | 98.50 |
| EN | 2 | 98.50 |
| EO | 2 | 98.50 |
| EP | 2 | 98.50 |
| EQ | 2 | 98.50 |
| ER | 2 | 98.50 |
| ES | 2 | 98.50 |
| ET | 2 | 98.50 |
| EU | 2 | 98.50 |
| EV | 2 | 98.50 |
| EW | 2 | 102.44 |
| EX | 2 | 102.44 |
| EY | 2 | 102.44 |

Emission Factor 105 lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| EZ | 2 | 102.44 |
| FA | 2 | 102.44 |
| FB | 2 | 102.44 |
| FC | 2 | 102.44 |
| FD | 2 | 102.44 |
| FE | 2 | 102.44 |
| FF | 2 | 102.44 |
| FG | 2 | 102.44 |
| FH | 2 | 102.44 |
| FI | 2 | 102.44 |
| FJ | 2 | 102.44 |
| FK | 2 | 102.44 |
| FL | 2 | 102.44 |
| FM | 2 | 102.44 |
| FN | 2 | 102.44 |
| FO | 2 | 102.44 |
| FP | 2 | 102.44 |
| FQ | 2 | 102.44 |
| FR | 2 | 106.38 |
| FS | 2 | 106.38 |
| FT | 2 | 106.38 |
| FU | 2 | 106.38 |
| FV | 2 | 106.38 |
| FW | 2 | 106.38 |
| FX | 2 | 106.38 |

Emission Factor 105' lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| FY | 2 | 106.38 |
| FZ | 2 | 106.38 |
| GA | 2 | 106.38 |
| GB | 2 | 106.38 |
| GC | 2 | 106.38 |
| GD | 2 | 110.32 |
| GE | 2 | 110.32 |
| GF | 2 | 110.32 |
| GG | 2 | 110.32 |
| GH | 2 | 110.32 |
| GI | 2 | 110.32 |
| GJ | 2 | 110.32 |
| GK | 2 | 110.32 |
| GL | 2 | 110.32 |
| GM | 2 | 110.32 |
| GN | 2 | 110.32 |
| GO | 2 | 110.32 |
| GP | 2 | 110.32 |
| GQ | 2 | 110.32 |
| GR | 2 | 110.32[b] |
| GS | 2 | 114.26 |
| GT | 2 | 114.26 |
| GU | 2 | 114.26 |
| GV | 2 | 114.26 |
| GW | 2 | 114.26 |

Emission Factor 105 lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| GX | 2 | 114.26 |
| GY | 2 | 114.26 |
| GZ | 2 | 114.26 |
| HA | 2 | 114.26 |
| HB | 2 | 114.26 |
| HC | 2 | 118.20 |
| HD | 2 | 118.20 |
| HE | 2 | 118.20 |
| HF | 2 | 118.20 |
| HG | 2 | 118.20 |
| HH | 2 | 118.20 |
| HI | 2 | 118.20 |
| HJ | 2 | 118.20 |
| HK | 2 | 118.20 |
| HL | 2 | 118.20 |
| HM | 2 | 118.20 |
| HN | 2 | 118.20 |
| HO | 2 | 118.20 |
| HP | 2 | 118.20 |
| HQ | 2 | 118.20 |
| HR | 2 | 126.08 |
| HS | 2 | 126.08 |
| HT | 2 | 126.08 |
| HU | 2 | 126.08 |
| HV | 2 | 126.08 |

Emission Factor 105 lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| HW | 2 | 126.08 |
| HX | 2 | 126.08 |
| HY | 2 | 126.08 |
| HZ | 2 | 126.08 |
| IA | 2 | 126.08 |
| IB | 2 | 126.08 |
| IC | 2 | 130.02 |
| ID | 2 | 130.02 |
| IE | 2 | 130.02 |
| IF | 2 | 130.02 |
| IG | 2 | 130.02 |
| IH | 2 | 130.02 |
| II | 2 | 130.02 |
| IJ | 2 | 133.96 |
| IK | 2 | 133.96 |
| IL | 2 | 133.96 |
| IM | 2 | 133.96 |
| IN | 2 | 133.96 |
| IO | 2 | 133.96 |
| IP | 2 | 133.96 |
| IQ | 2 | 137.90 |
| IR | 2 | 137.90 |
| IS | 2 | 137.90 |
| IT | 2 | 137.90 |

Emission Factor 105 lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| IU | 2 | 137.90 |
| IV | 2 | 137.90 |
| IW | 2 | 137.90 |
| IX | 2 | 137.90[c] |
| IY | 2 | 141.84 |
| IZ | 2 | 141.84 |
| JA | 2 | 141.84 |
| JB | 2 | 145.78 |
| JC | 2 | 145.78 |
| JD | 2 | 145.78 |
| JE | 2 | 145.78 |
| JF | 2 | 149.72 |
| JG | 2 | 149.72 |
| JH | 2 | 149.72 |
| JI | 2 | 149.72 |
| JJ | 2 | 149.72 |
| JK | 2 | 149.72 |
| JL | 2 | 149.72 |
| JM | 2 | 153.66 |
| JN | 2 | 161.54 |
| JO | 2 | 220.64 |
| JP | 3 | 119.00 |
| | 4 | not specific |
| | 5 | ref. not available |

Emission Factor 105 lb/$10^3$ gal (continued)

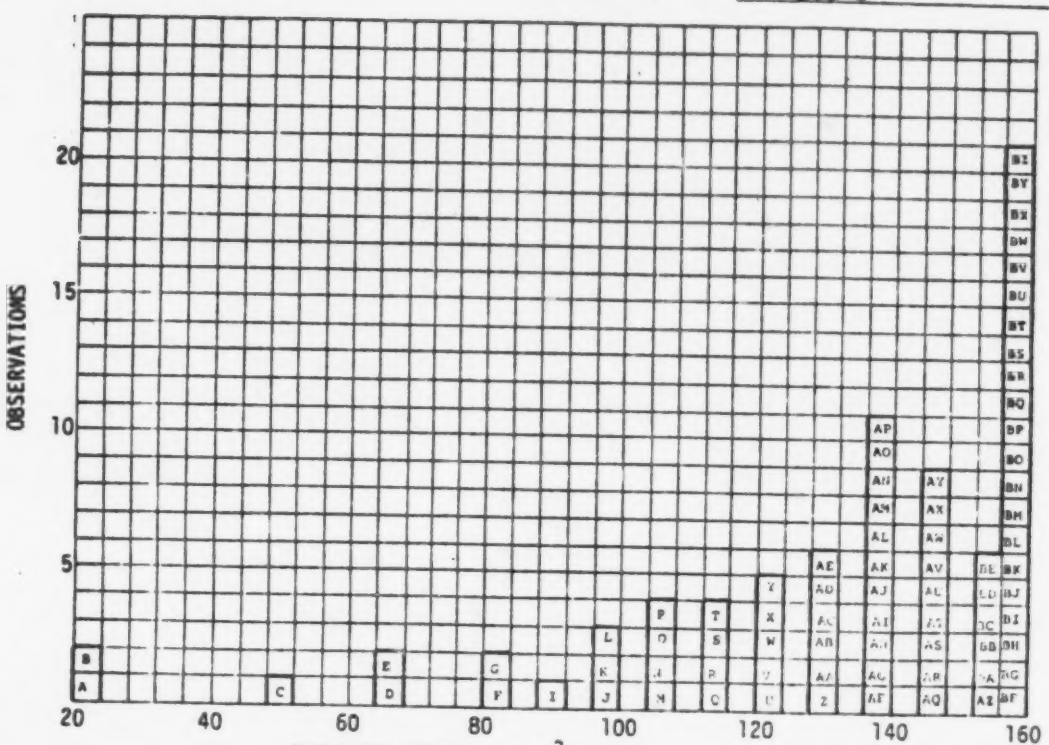
| Observation | AP-42 Ref. NO. | Observed Value |
|---|---|---|
| | 6 | does not deal with power plant |
| | 9 | does not deal with power plant |
| | 10 | does not deal with power plant |
| | 12 | ref. not available |
| | 13 | ref. not available |
| JQ | 15[d] | 76.0 |
| JR | 15[d] | 75.0 |
| JS | 15[d] | 94.0 |
| JT | 15[d] | 48.0 |
| JU | 15[d] | 33.0 |
| JV | 15[d] | 49.0 |
| JW | 15[d] | 109.0 |
| JX | 16 | 47.8 |
| JY | 16 | 53.9 |
| JZ | 16 | 34.8 |
| KA | 16 | 33.9 |
| KB | 16 | 20.9 |
| KC | 16 | 33.0 |
| KD | 16 | 104.3 |
| KE | 16 | 59.1 |
| KF | 16 | 59.1 |
| KG | 16 | 50.4 |
| KH | 16 | 32.2 |
| KI | 16 | 37.4 |
| KJ | 16 | 40.0 |

Emission Factor 105 lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| KK | 16 | 34.8 |
| KL | 16 | 32.2 |
| KM | 16 | 31.3 |

b) represents 130 tests and 554 samples on power plants
c) represents 50 tests on power plants
d) considering that the medium sized and large sized boilers are used in power plants, these emissions are taken from such sources.

Power Plant or Industrial & Commerical SO
Emission Factor 157S lb/$10^3$ gal
Pollutant $SO_x$ from Residual Oil Combustion
AP-42 Pg. No. 1.3-2




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 2 | 20.49 S |
| B | 2 | 20.49 S |
| C | 2 | 51.22 S |
| D | 2 | 66.98 S |
| E | 2 | 66.98 S |
| F | 2 | 82.74 S |
| G | 2 | 82.74 S |
| H | 2 | 90.62 S |

Emission Factor 157S lb/$10^3$gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| I | 2 | 90.62 S |
| J | 2 | 98.50 S |
| K | 2 | 98.50 S |
| L | 2 | 98.50 S |
| M | 2 | 106.38 S |
| N | 2 | 106.38 S |
| O | 2 | 106.38 S |
| P | 2 | 106.38 S |
| Q | 2 | 114.26 S |
| R | 2 | 114.26 S |
| S | 2 | 114.26 S |
| T | 2 | 114.26 S |
| U | 2 | 122.14 S |
| V | 2 | 122.14 S |
| W | 2 | 122.14 S |
| X | 2 | 122.14 S |
| Y | 2 | 122.14 S |
| Z | 2 | 130.02 S |
| AA | 2 | 130.02 S |
| AB | 2 | 130.02 S |
| AC | 2 | 130.02 S |
| AD | 2 | 130.02 S |
| AE | 2 | 130.02 S |
| AF | 2 | 137.90 S |
| AG | 2 | 137.90 S |
| AH | 2 | 137.90 S |

Emission Factor 157S · lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| AI | 2 | 137.90 S |
| AJ | 2 | 137.90 S |
| AK | 2 | 137.90 S |
| AL | 2 | 137.90 S |
| AM | 2 | 137.90 S |
| AN | 2 | 137.90 S |
| AO | 2 | 137.90 S |
| AP | 2 | 137.90 S |
| AQ | 2 | 145.78 S |
| AR | 2 | 145.78 S |
| AS | 2 | 145.78 S |
| AT | 2 | 145.78 S |
| AU | 3 | 145.78 S |
| AV | 2 | 145.78 S |
| AW | 2 | 145.78 S |
| AX | 2 | 145.78 S |
| AY | 2 | 145.78 S |
| AZ | 2 | 153.66 S |
| BA | 2 | 153.66 S |
| BB | 2 | 153.66 S |
| BC | 2 | 153.66 S |
| BD | 2 | 153.66 S |
| BE | 2 | 153.66 S |
| BF | 2 | 157.60 S |
| BG | 2 | 157.60 S |

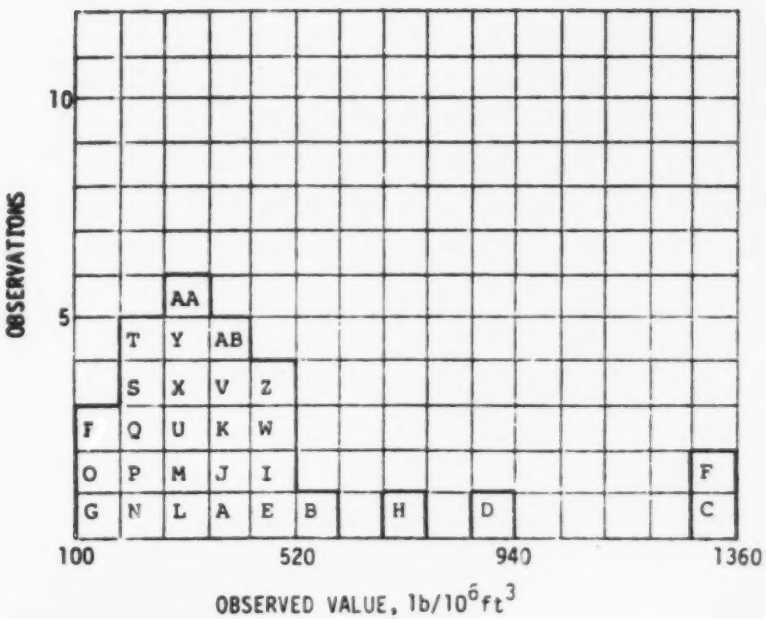
Emission Factor 157S lb/$10^3$ gal (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| BH | 2 | 157.60 S |
| BI | 2 | 157.60 S |
| BJ | 2 | 157.60 S |
| BK | 2 | 157.60 S |
| BL | 2 | 157.60 S |
| BM | 2 | 157.60 S |
| BN | 2 | 157.60 S |
| BO | 2 | 157.60 S |
| BP | 2 | 157.60 S |
| BQ | 2 | 157.60 S |
| BR | 2 | 157.60 S |
| BS | 2 | 157.60 S |
| BT | 2 | 157.60 S |
| BU | 2 | 157.60 S |
| BV | 2 | 157.60 S |
| BW | 2 | 157.60 S |
| BX | 2 | 157.60 S |
| BY | 2 | 157.60 S |
| BZ | 2 | 157.60 S |

Emission Factor POWER PLANT 600 lb/$10^6$ $ft^3$

Pollutant $NO_x$ from Natural Gas Combustion

AP-42 Pg. No. 1.4-2




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | ref. not available |
| A | 3 | 390.0 |
| | 4 | none |
| B | 9 | 535.0 |
| C | 9 | 1360.0 |
| D | 9 | 920.0 |
| E | 9 | 460.0 |
| F | 9 | 1290.0 |

Emission Factor 600 lb/$10^6$ $ft^3$ (continued)

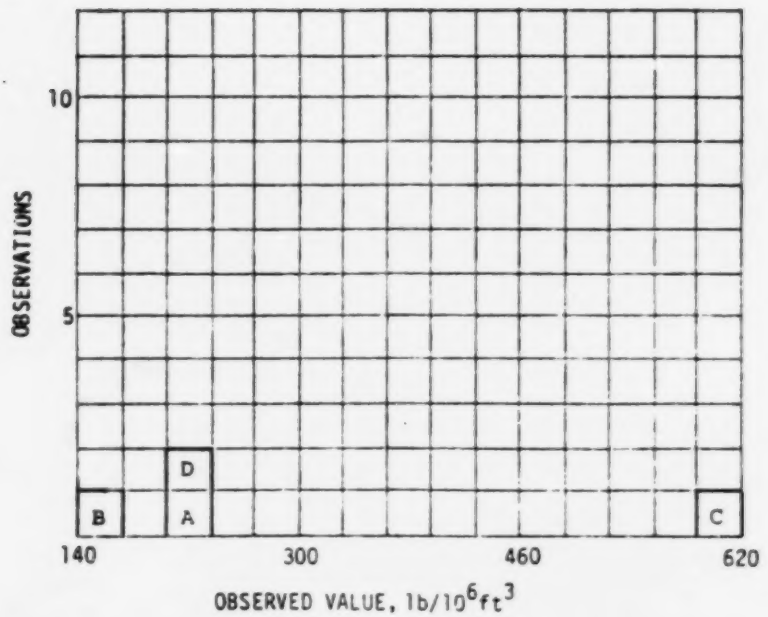
| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| G | 9 | 100.0 |
| H | 9 | 715.0 |
| I | 10 | 480.0 |
| J | 10 | 388.5 |
| K | 10 | 367.5 |
| L | 10 | 325.5 |
| M | 10 | 294.0 |
| N | 10 | 252.0 |
| | 11 | ref. not available |
| O | 12 | 170.0 |
| P | 12 | 196.0 |
| Q | 12 | 261.5 |
| R | 12 | 111.0 |
| S | 12 | 203.0 |
| T | 12 | 235.0 |
| U | 12 | 327.0 |
| V | 12 | 385.5 |
| W | 12 | 444.5 |
| X | 12 | 287.6 |
| Y | 12 | 274.6 |
| Z | 12 | 444.5 |
| AA | 12 | 326.9 |
| AB | 12 | 392.2 |

**Industrial Process Boiler**

Emission Factor (120 to 230) $lb/10^6 ft^3$

Pollutant $NO_x$ from natural gas combustion

AP-42 Pg. No. 1.4-2




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | None |
| A | 3 | 214 |
| B | 4 | 141.8 |
| C | 9 | 620 |
| | 10 | none |
| | 11 | ref. not available |
| | 12 | none |
| | 13 | none |

## Industrial Process Boiler

Emission Factor (120 to 230) lb/$10^6$ $ft^3$ (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| D | 9 | 210 |

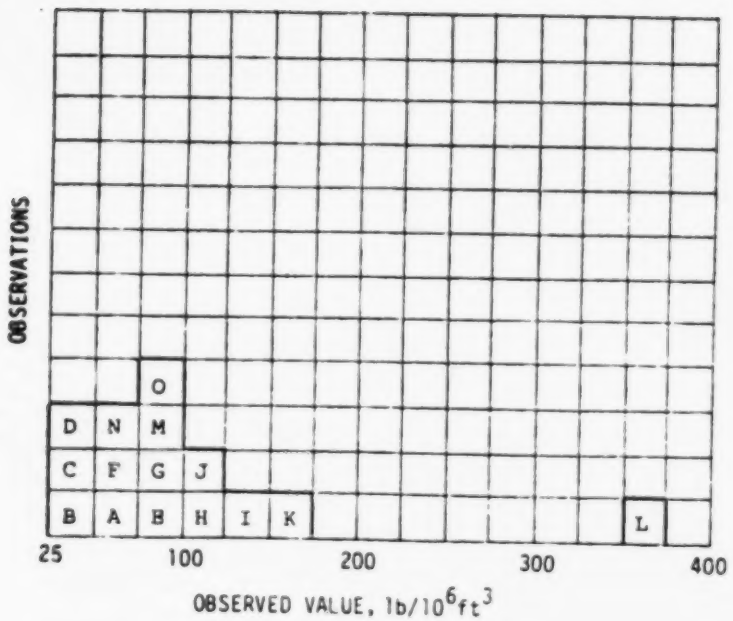
$\bar{X}$ = 296.45 lb/$10^6$ $ft^3$

Std. Dev. = (620-142)/2.05 = 232.25

Emission Factor 80 to 120 lb/$10^6$ $ft^3$

Pollutant $NO_x$ from Natural Gas Combustion

AP-42 Pg. No. 1.4-2




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 2 | 62.01 |
| B | 2 | 26.87 |
| C | 2 | 41.34 |
| D | 2 | 41.34 |
| E | 2 | 82.69 |
| F | 2 | 62.01 |
| G | 2 | 82.69 |
| H | 2 | 124.02 |

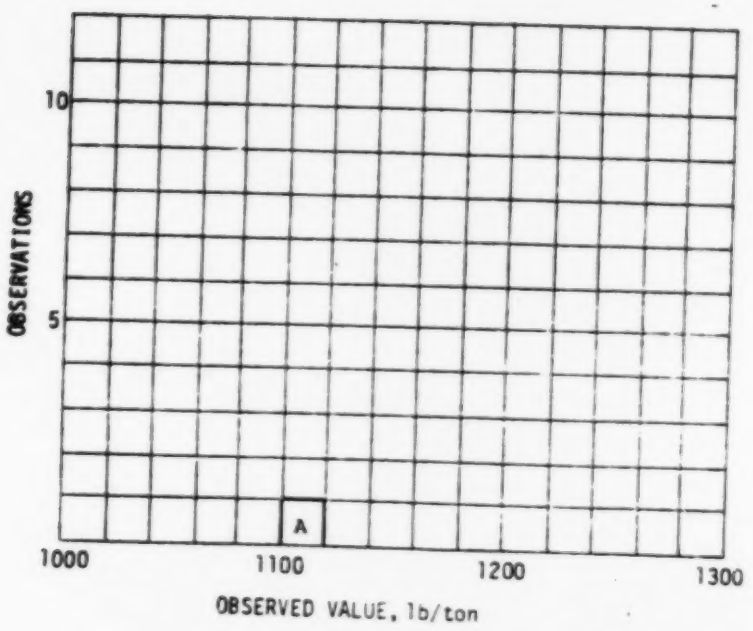
Emission Factor 80 to 120 lb/$10^6$ $ft^3$ (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| I | 2 | 144.70 |
| J | 3 | 116.00 |
| K | 4 | 161.7 |
| L | 4 | 354.4 |
| M | 4 | 90.8 |
| N | 4 | 62.0 |
| | 9 | none |
| | 10 | none |
| O | 11 | 82.0 |
| | 12 | none |
| | 13 | none |

Emission Factor 1120 lbs/ton

Pollutant HydroCarbon (paint) surface coating

AP-42 Pg. No. 4.2-1

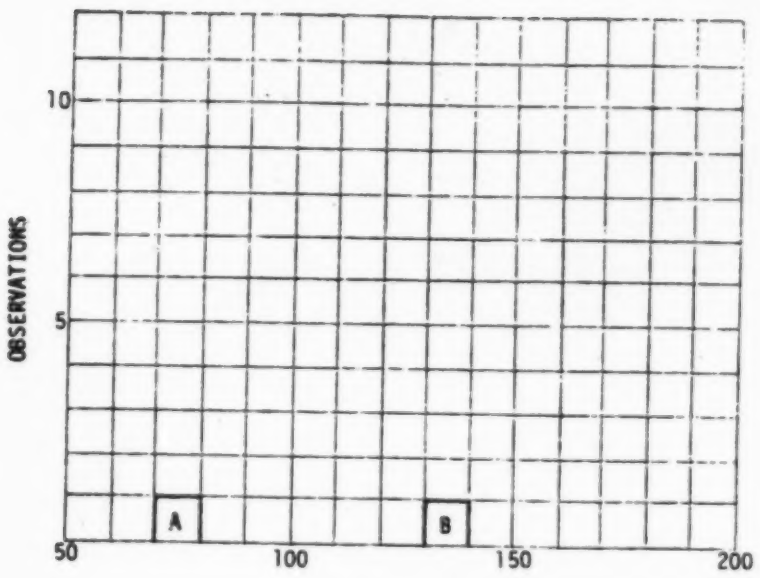



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 1120.0 lbs/ton |

Emission Factor 100 (30 to 160) lb/day-tank

Pollutant ~~HC from Petroleum Storage~~ Floating Roof (Crude Oil ~~Breathing~~)

AP-42 Pg. No. 4.3-1

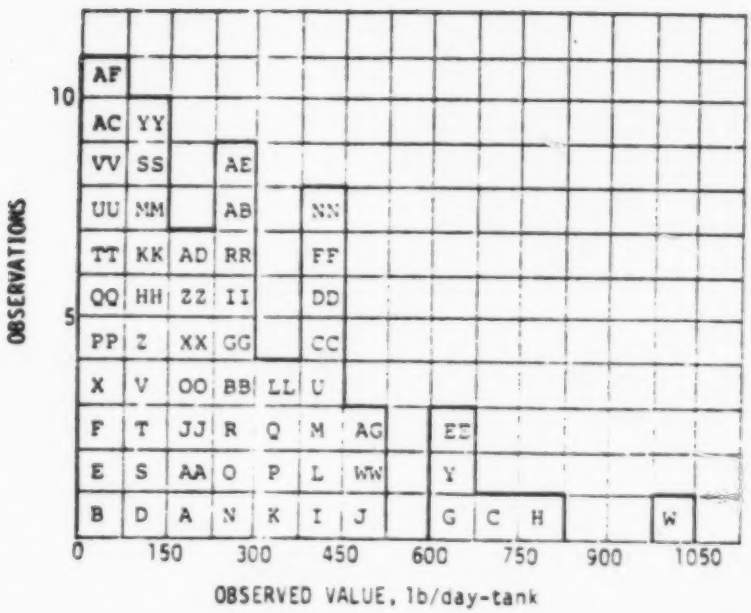



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 3 | 80.0 |
| B | 3 | 133.0 |

Emission Factor 140 (40-210) lb/day Tank

Pollutant HC from Petroleum Storage Floating Roof (Gasoline or Petroleum prods)

AP-42 Pg. No. 4.3-1




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 3 | 197.0 |
| B | 3 | 65.0 |
| C | 3 | 743.0 |
| D | 3 | 111.0 |
| E | 3 | 60.0 |
| F | 3 | 21.0 |
| G | 3 | 612.0 |
| H | 3 | 809.0 |

Emission Factor 140 (40-210) lb/day-(continued)
Tank

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| I | 3 | 439.0 |
| J | 3 | 504.0 |
| K | 3 | 329.0 |
| L | 3 | 430.0 |
| M | 3 | 402.0 |
| N | 3 | 300.0 |
| O | 3 | 246.0 |
| P | 3 | 363.0 |
| Q | 3 | 351.0 |
| R | 3 | 262.0 |
| S | 3 | 145.0 |
| T | 3 | 145.0 |
| U | 3 | 377.0 |
| V | 3 | 121.0 |
| W | 3 | 1349.0 |
| X | 3 | 36.0 |
| Y | 3 | 628.0 |
| Z | 3 | 62.0 |
| AA | 3 | 176.0 |
| BB | 3 | 270.0 |
| CC | 3 | 413.0 |
| DD | 3 | 388.0 |
| EE | 3 | 642.0 |
| FF | 3 | 412.0 |
| GG | 3 | 271.0 |

Emission Factor 140 (40-210) lb/day (continued)
Tank

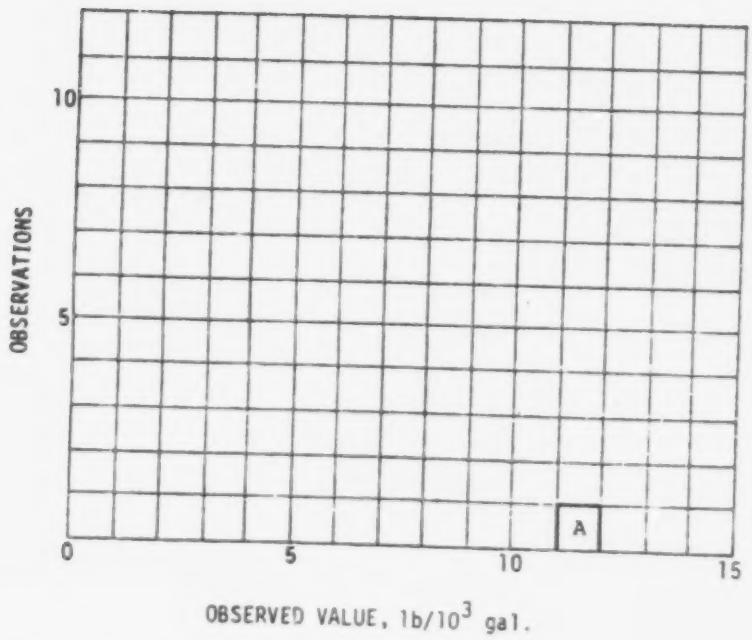
| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| HH | 3 | 90.0 |
| II | 3 | 285.0 |
| JJ | 3 | 158.0 |
| KK | 3 | 80.0 |
| LL | 3 | 323.0 |
| MM | 3 | 104.0 |
| NN | 3 | 426.0 |
| OO | 3 | 214.0 |
| PP | 3 | 0.0 |
| QQ | 3 | 0.0 |
| RR | 3 | 267.0 |
| SS | 3 | 148.0 |
| TT | 3 | 57.0 |
| UU | 3 | 0.0 |
| VV | 3 | 0.0 |
| WW | 3 | 377.0 |
| XX | 3 | 195.0 |
| YY | 3 | 132.0 |
| ZZ | 3 | 212.0 |
| AB | 3 | 233.0 |
| AC | 3 | 0.0 |
| AD | 3 | 181.0 |
| AE | 3 | 266.0 |
| AF | 3 | 0.0 |
| AG | 3 | 499.0 |

Filling Service Stations

Emission Factor Tank Splash Fill
12lb/$10^3$ gal

Pollutant HC Evaporation Losses from Gasoline Marketing

AP-42 Pg. No. 4.4-2



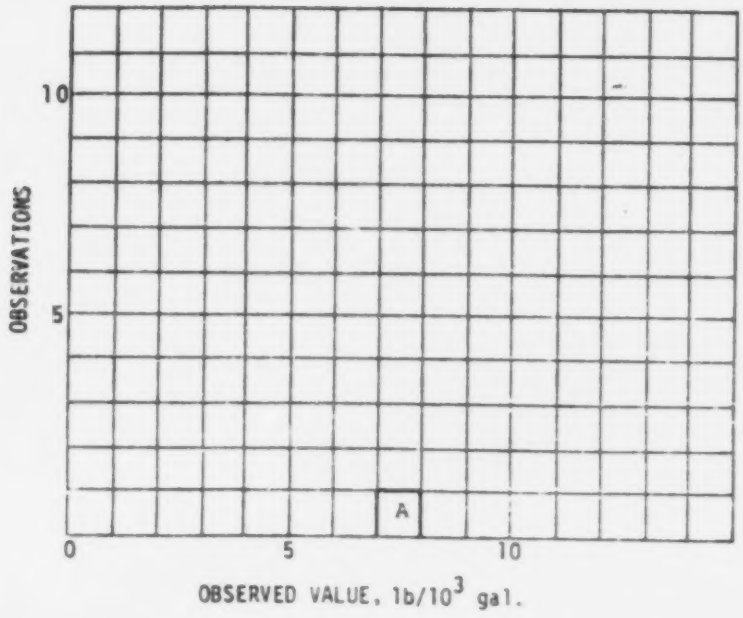

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 11.5 |

Filling Service Statio

Emission Factor Tank Submerged Fill
7 lb/$10^3$ gal

Pollutant HC Evaporation Losses from Gasoline

AP-42 Pg. No. 4.4

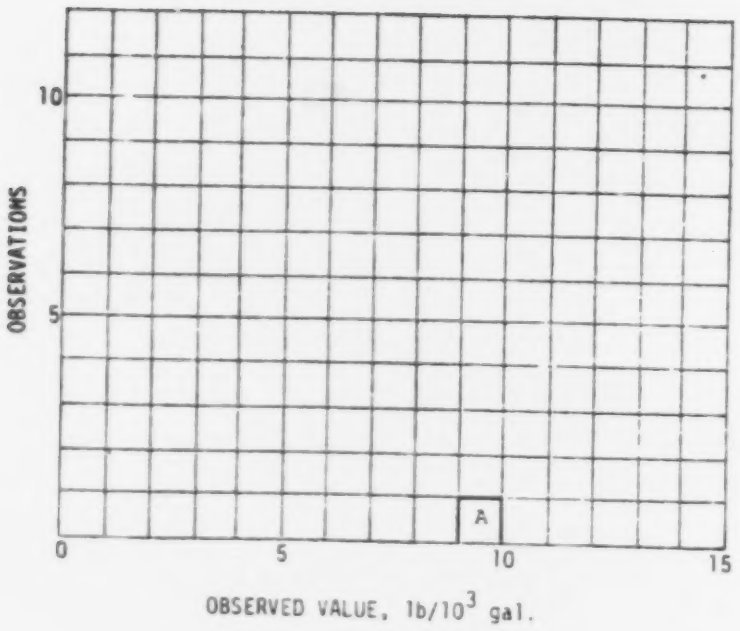



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 7.3 |

Emission Factor Filling ServiceStation Tanks 50% Splash Fill & 50% Submerged Fill ~~9 lb/10$^3$ gal~~

Pollutant HC Evaporation Losses from Gasoline Marketing

AP-42 Pg. No. 4.4-2

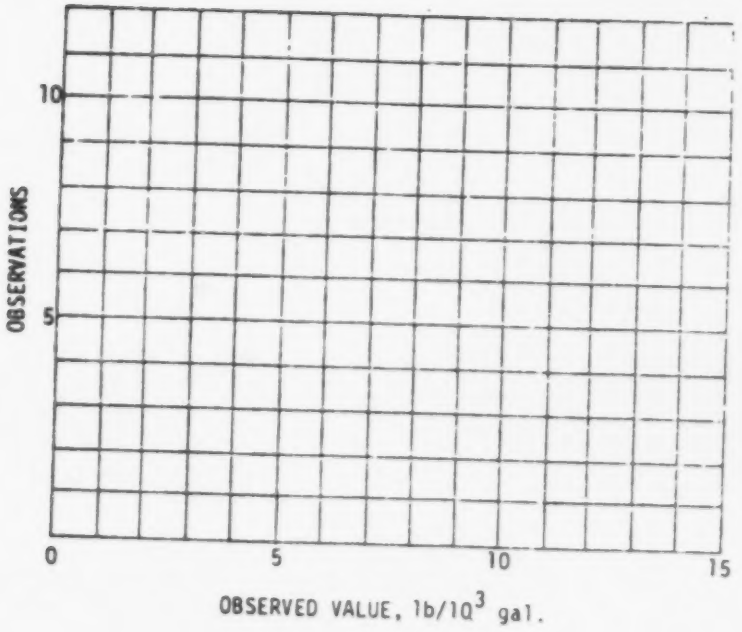



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 9.4 |

Emission Factor Filling Automobile Tanks 12 lb/$10^3$ gal

Pollutant HC Evaporation losses from Gasoline Marketing

AP-42 Pg. No. 4.4-2

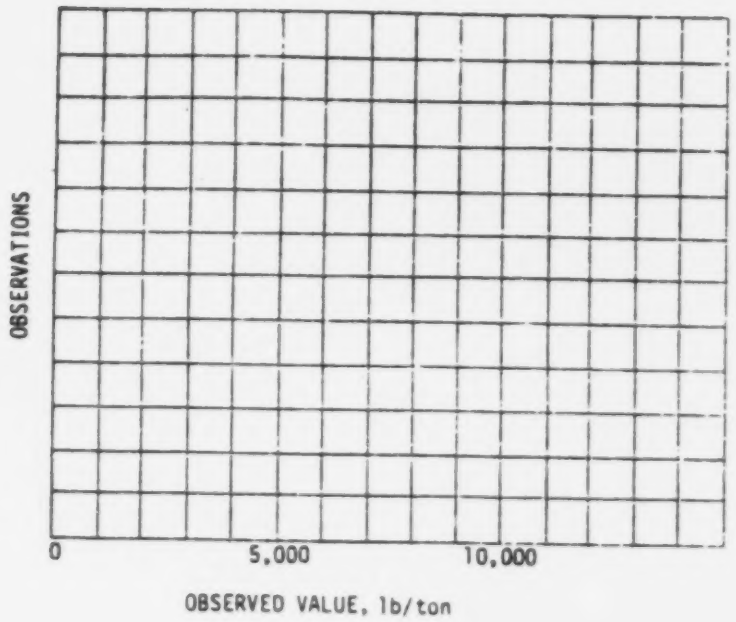



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | ref. not available |
| | 3 | ref. not available |

Emission Factor 11,500 lb/ton as Methane

Pollutant HC from Channel Process Carbon Black

AP-42 Pg. No. 5.3-2

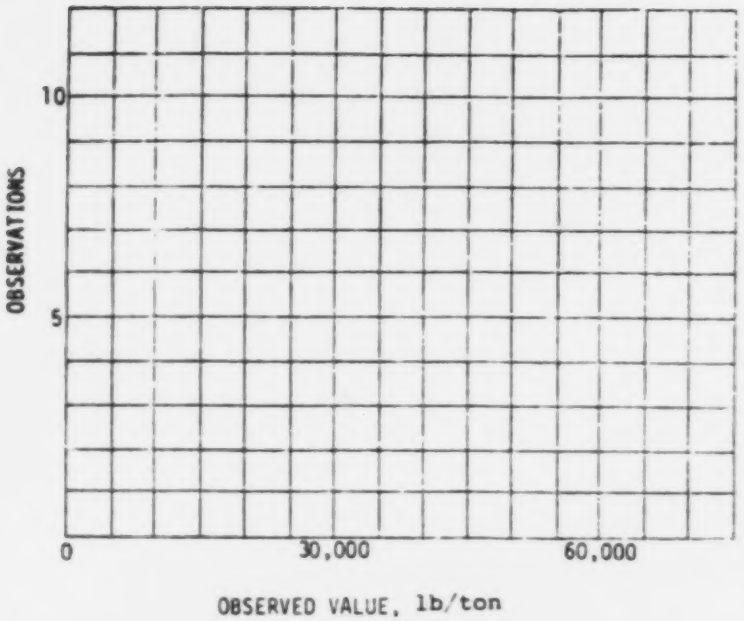



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | none |
| | 3 | none |
| | 5 | none |
| | 6 | none |

Emission Factor 33,500 lb/ton

Pollutant CO from Channel Process for Carbon Black Production

AP-42 Pg. No. 5.3-1

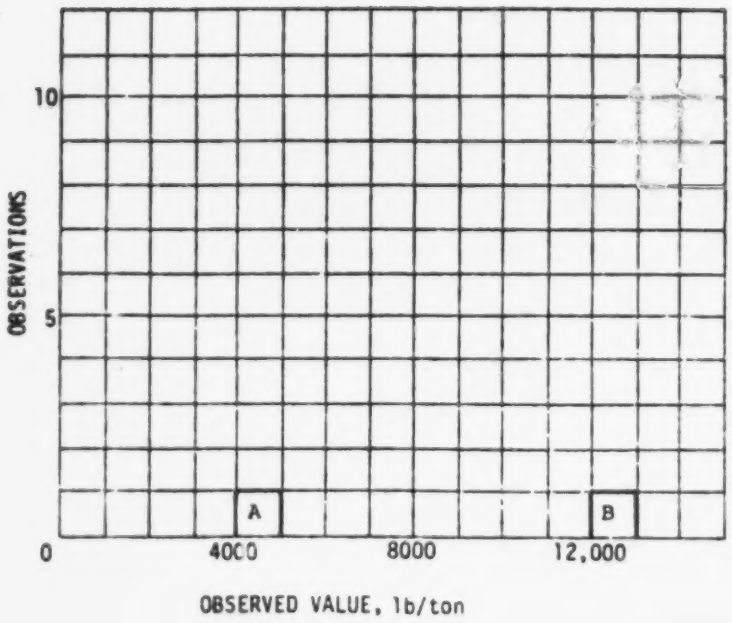



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | none |
| | 3 | none |
| | 5 | none |
| | 6 | none |

Emission Factor 5,300 lb/ton

Pollutant Carbon Black-CO from Gas Furnace

AP-42 Pg. No. 5.3-2

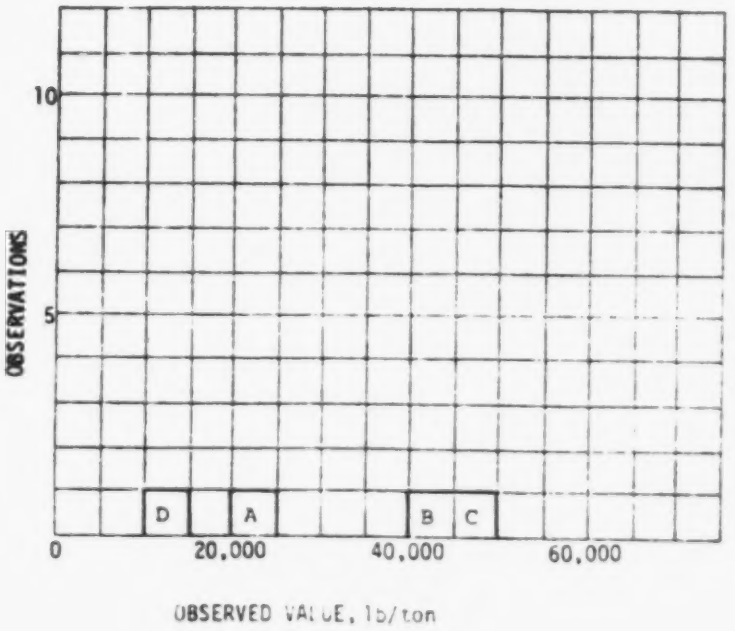



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 2 | 4744.3 |
| B | 2 | 12542.9 |
| | 3 | none |
| | 5 | none |
| | 6 | none |

Emission Factor 4,500 lb/ton

Pollutant Carbon Black-CO from Oil Furnace

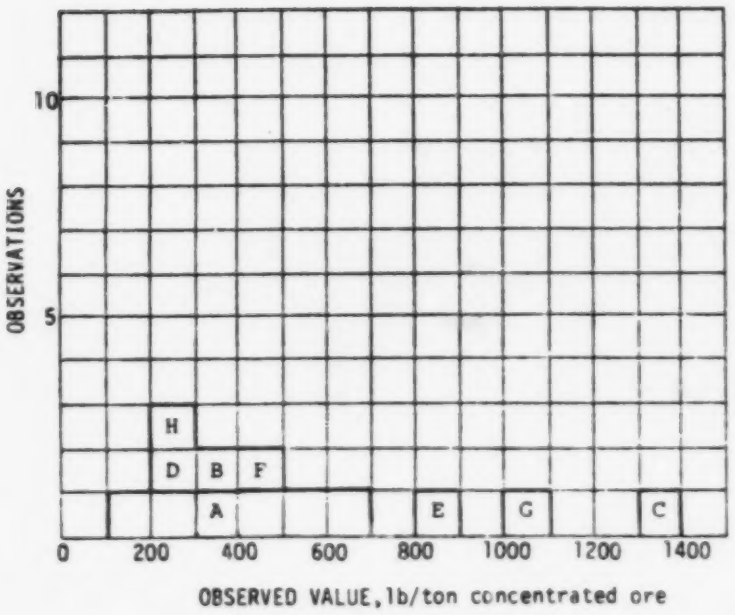
AP-42 Pg. No. 5.3-2




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 2 | 22700.0 |
| B | 2 | 44900.0 |
| C | 2 | 47000.0 |
| D | 2 | 13170.0 |
| | 3 | none |
| | 5 | none |
| | 6 | none |

Emission Factor 60 lb/ton
Copper Smelting
Pollutant $SO_2$ from Roasting

AP-42 Pg. No. 7.3-2

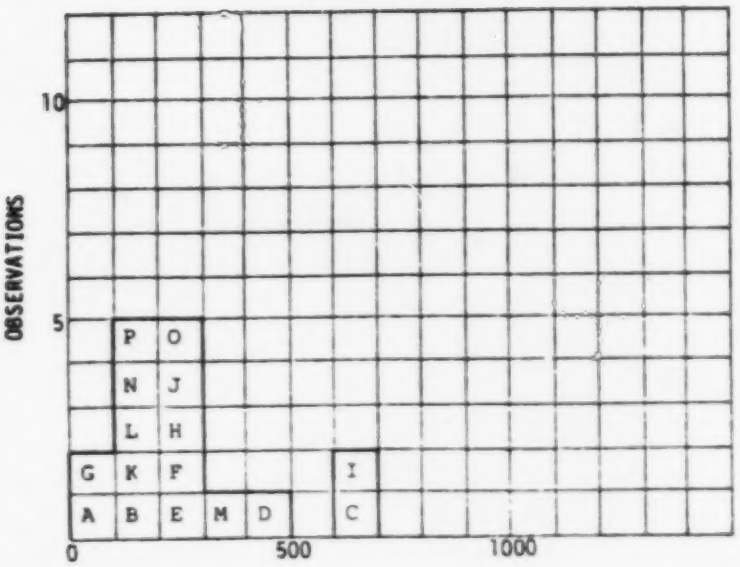



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 2 | 151.0 to 604.0 |
| B | 4 | 373.0 |
| C | 4 | 1328.0 |
| D | 4 | 255.0 |
| E | 4 | 805.0 |
| F | 4 | 439.0 |
| G | 4 | 1010.0 |
| H | 4 | 254.0 |

Emission Factor 320 lb/ton

Pollutant Copper Smelting $SO_2$ from Smelting Reverberatory Furnace

AP-42 Pg. No. 7.3-2




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | none |
| A | 4 | 82.0 |
| B | 4 | 126.0 |
| C | 4 | 688.0 |
| D | 4 | 459.0 |
| E | 4 | 244.0 |
| F | 4 | 238.0 |
| G | 4 | 44.0 |

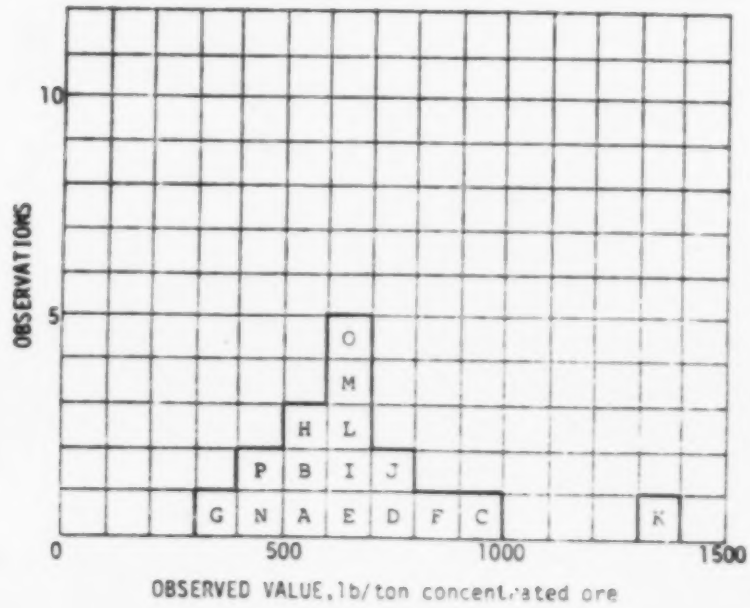
Emission Factor 320 lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| H | 4 | 231.0 |
| I | 4 | 693.0 |
| J | 4 | 263.0 |
| K | 4 | 107.0 |
| L | 4 | 125.0 |
| M | 4 | 355.0 |
| N | 4 | 113.0 |
| O | 4 | 206.0 |
| P | 4 | 106.0 |

Emission Factor 870 lb/ton

Pollutant Copper Smelting $SO_2$ from Converter

AP-42 Pg. No. 7.3-2




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | none |
| A | 4 | 568.0 |
| B | 4 | 585.0 |
| C | 4 | 918.0 |
| D | 4 | 800.0 |
| E | 4 | 656.0 |
| F | 4 | 875.0 |
| G | 4 | 351.0 |

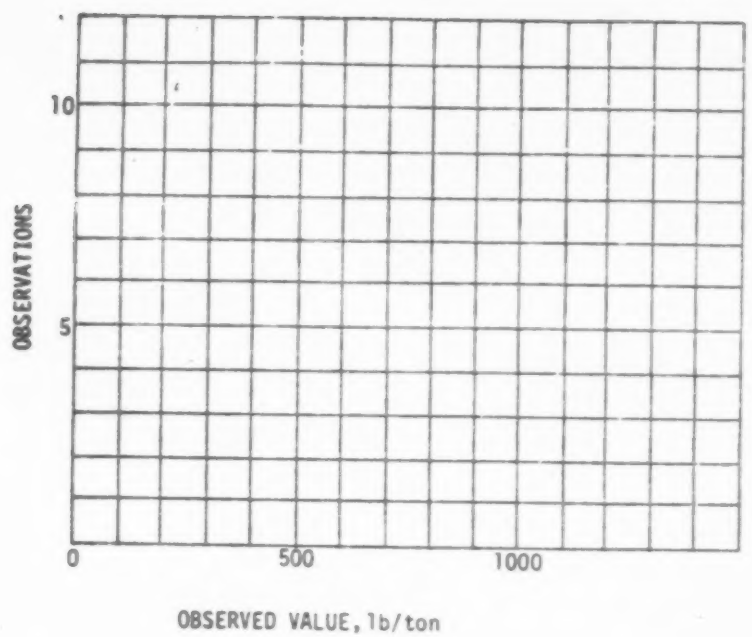
Emission Factor 870 lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| H | 4 | 596.0 |
| I | 4 | 661.0 |
| J | 4 | 744.0 |
| K | 4 | 1350.0 |
| L | 4 | 697.0 |
| M | 4 | 700.0 |
| N | 4 | 413.0 |
| O | 4 | 684.0 |
| P | 4 | 414.0 |

Emission Factor 565 lb/ton

Pollutant Particulate from Ferroalloy Production 90% FeSi

AP-42 Pg. No. 7.4-2

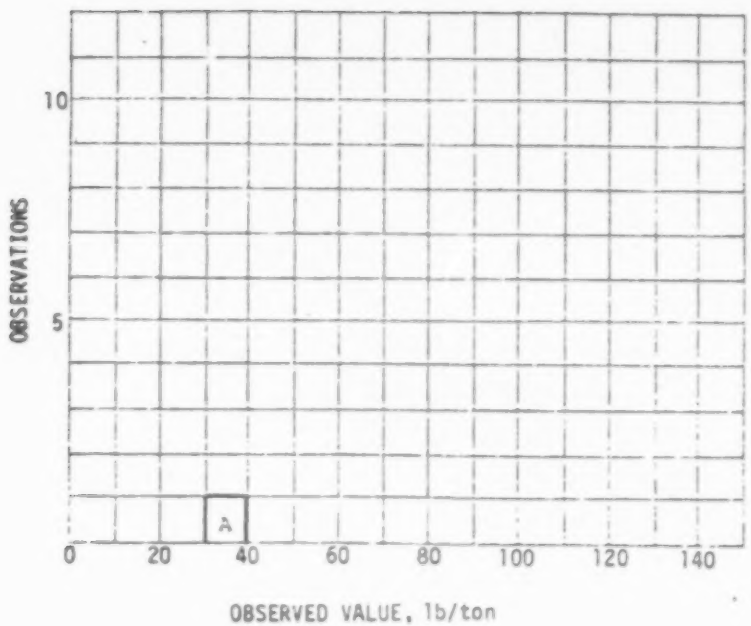



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 4 | ref. not available |

Emission Factor 40 lb/ton

Pollutant Particulate from Iron Production Blast Furnace-AGLCHG

AP-42 Pg. No. 7.5-6

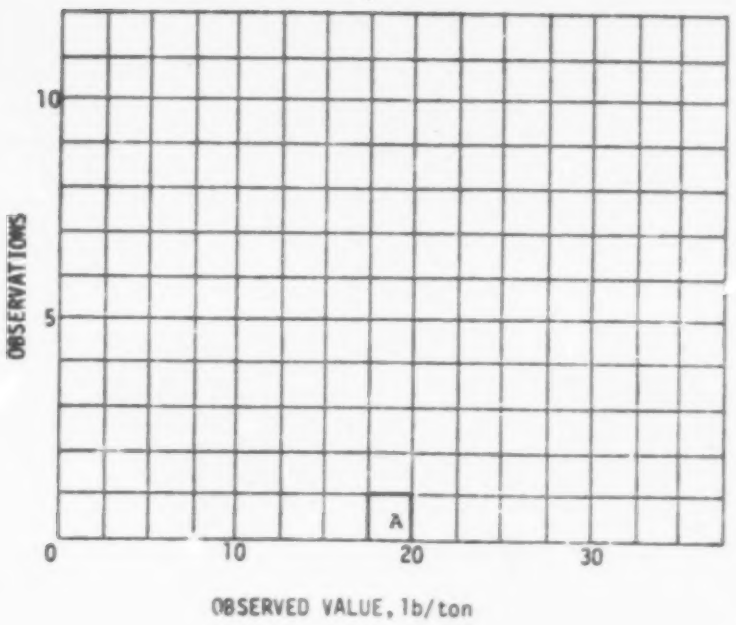



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | none |
| A | 3 | 40 |
| | 5 | none |

Emission Factor 20 lb/ton

Pollutant Particulate from Iron Production-Sintering (Windbox)

AP-42 Pg. No. 7.5-6

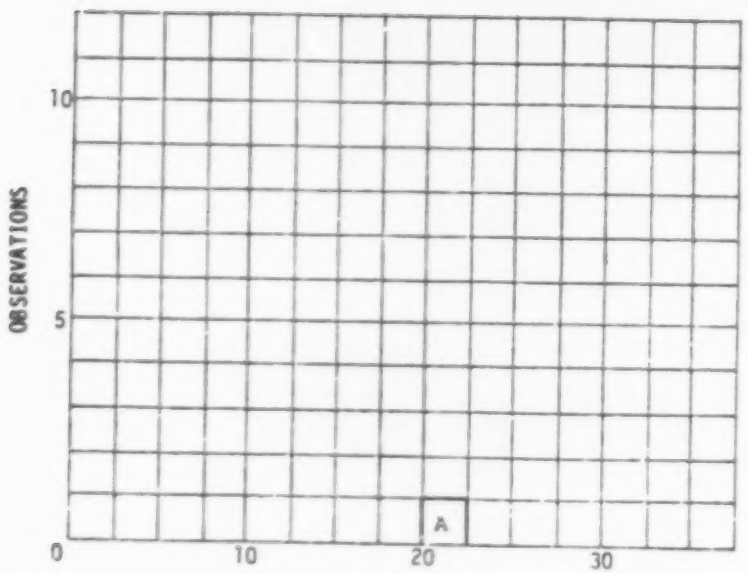



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 3 | 20.0 |

Emission Factor 22 lb/ton

Pollutant Particulate from Iron Production Sintering (Discharge)

AP-42 Pg. No. 7.5-6

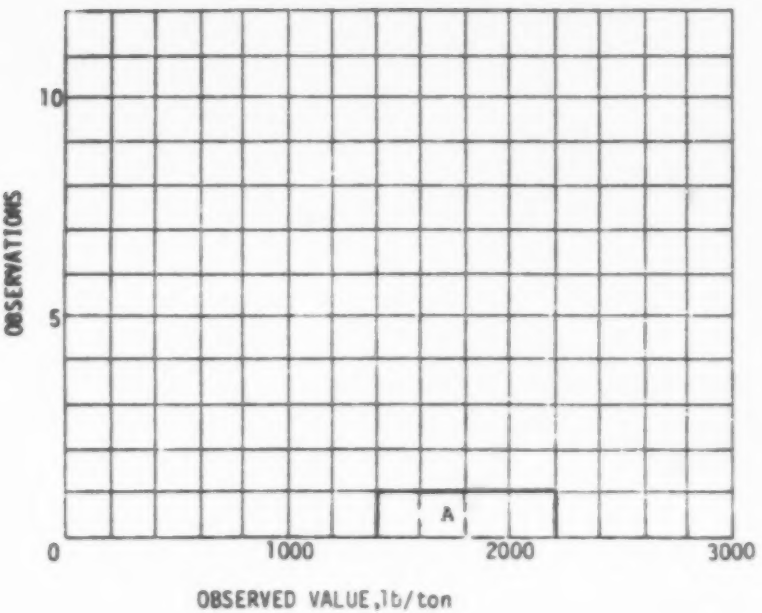



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 3 | 22.0 |

Emission Factor 1750 (1400 to 2100) lb/ton

Pollutant CO from Iron Production Blast Furnace-Ore Charge

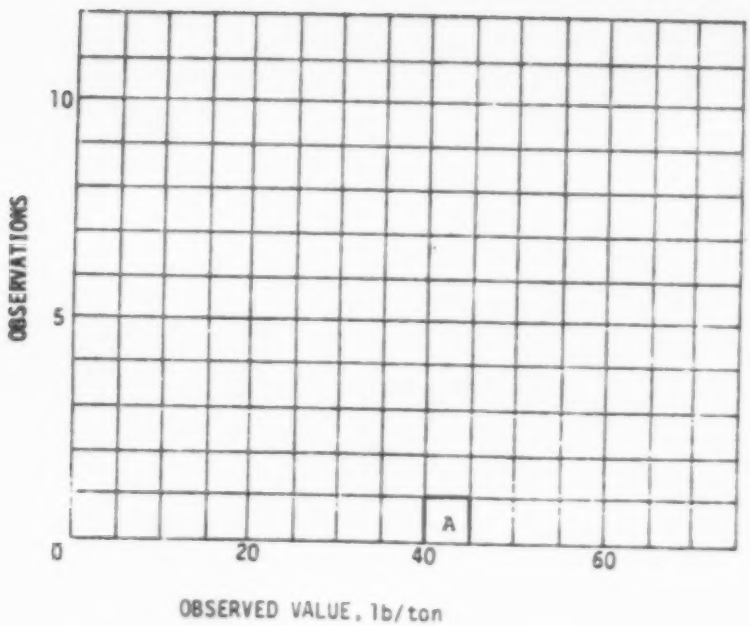
AP-42 Pg. No. 7.5-6




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | none |
| A | 3 | 1400.0 - 2100.0 |
| | 5 | none |

Emission Factor 44 lb/ton
Pollutant CO from Iron Production Sintering (Discharge)

AP-42 Pg. No. 7.5-6

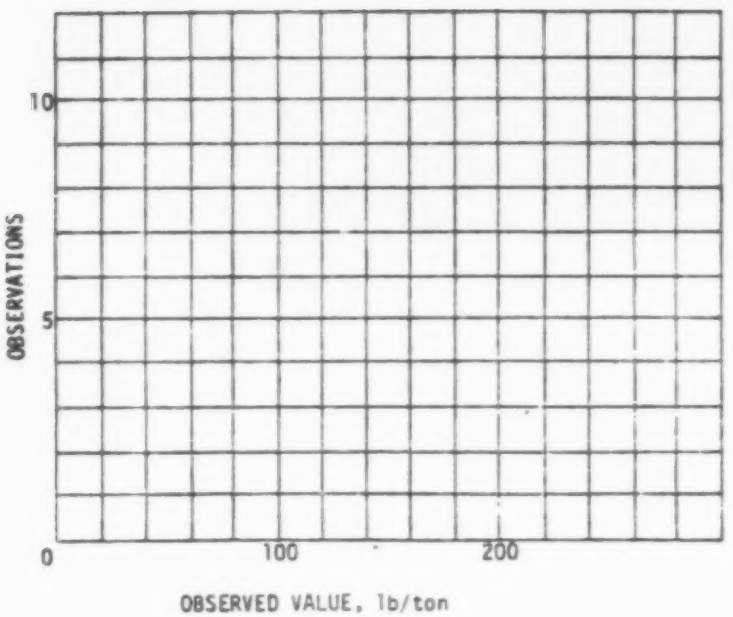



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 3 | 44.0 |

Emission Factor 145

Pollutant CO from Cupola at Gray Iron Foundry

AP-42 Pg. No. 7.10-1

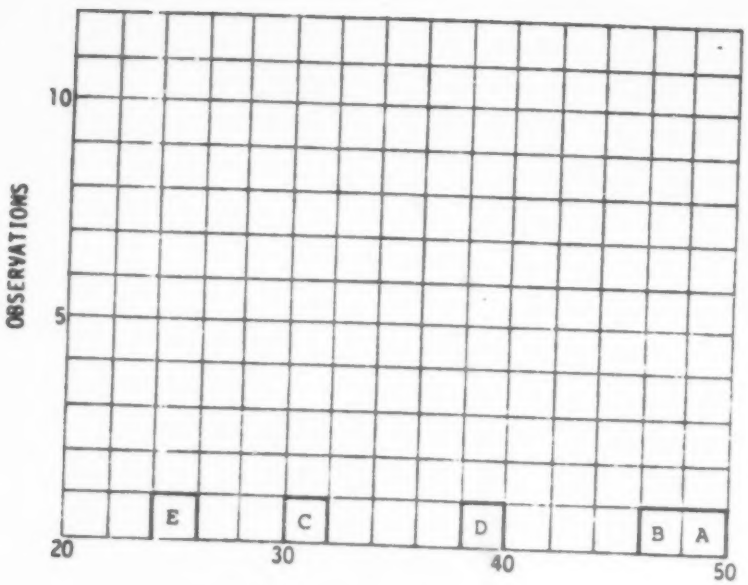



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 6 | ref. not available |

Emission Factor 45 lb/ton

Pollutant Particulate from Asphaltic Concrete Plant

AP-42 Pg. No. 8.1-5




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 50 |
| | 2 | none |
| B | 5 | 47.8 |
| C | | 31.3 |
| | 6 | none |
| | 7 | none |
| D | 8 | 40 |
| | 9 | ref. not availabl |

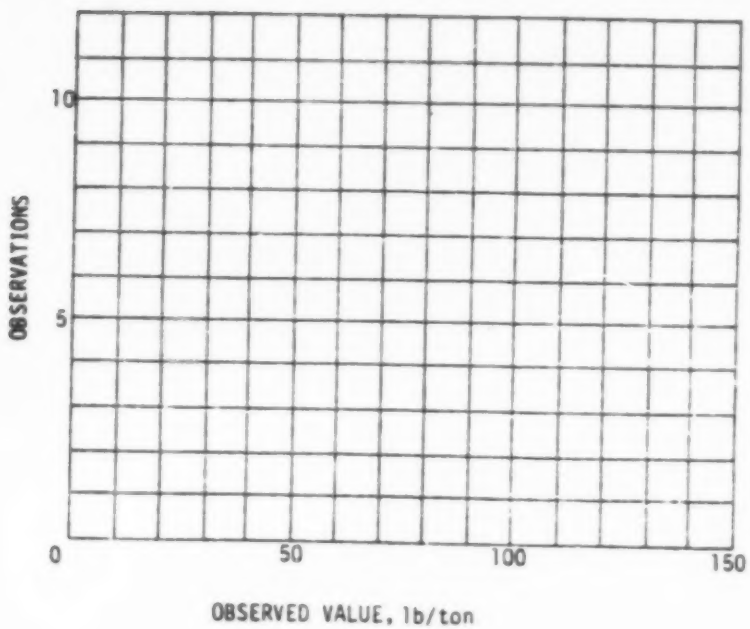
Emission Factor 45 lb/ton - (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| E | 10 | 25 |

Emission Factor 96 lb/ton

Pollutant Brick Manufacturing-Particulate from Raw Mat'l. Handling (Dryers, Grinders)

AP-42 Pg. No. 8.3-3




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 1[a] | none |
| | 2[a] | ref. not available |
| | 3[a] | ref. not available |
| | 4[a] | none |
| | 5[a] | none |
| | 6[a] | ref. not available |
| | 2[b] | none |
| | 3[b] | ref. not available |

Emission Factor 96 lb/ton (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 4[b] | none |
| | 5[b] | none |

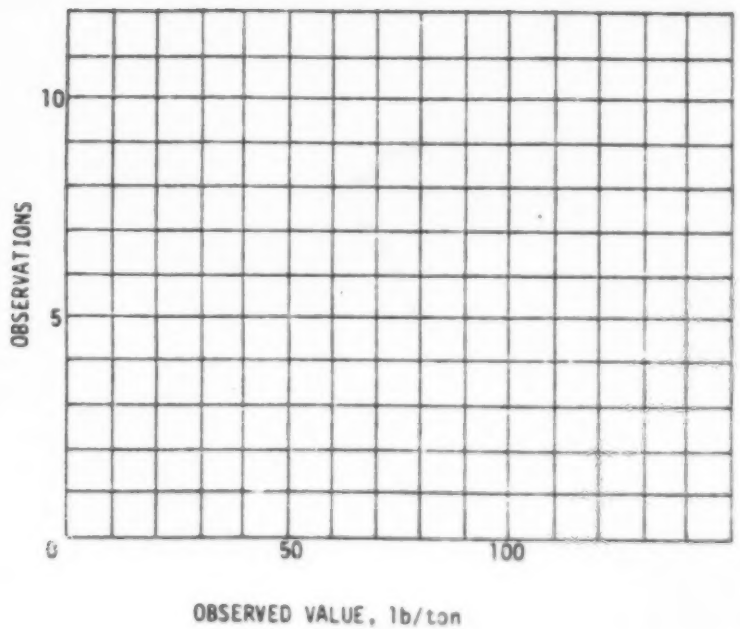
a) This reference from Section 8.6.

b) This reference from Section 8.7.

Emission Factor 34 lb/ton

Pollutant Brick ~~Manufacturing~~ Particulate from Raw Mat'l. ~~Handling (Storage)~~

AP-42 Pg. No. 8.3-3




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 1[a] | none |
| | 2[a] | ref. not available |
| | 2[b] | none |
| | 3[b] | ref. not available |
| | 4[b] | none |
| | 5[b] | none |

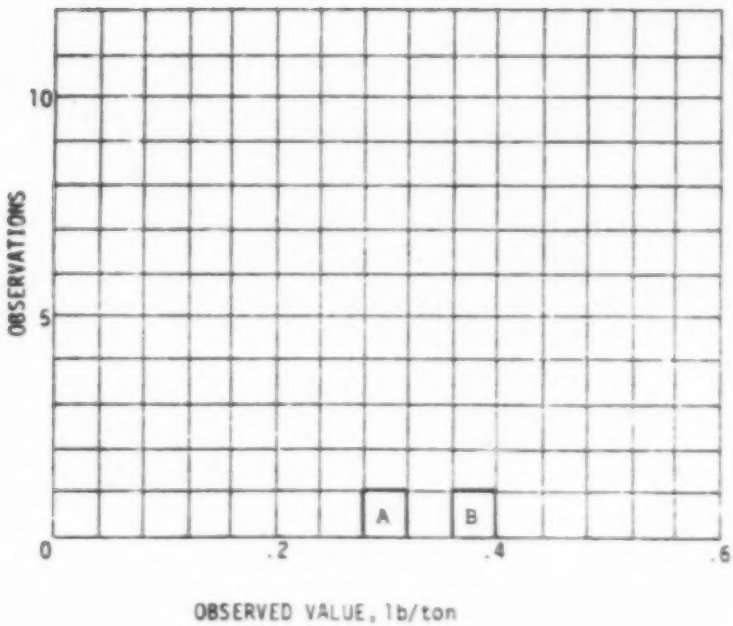
a) Reference in Section 8.6.

b) Reference in Section 8.7.

Emission Factor 0.04 lb/ton

Pollutant Particulate from Gas Fired Tunnel Kiln at Brick Mfg.

AP-42 Pg. No. 8.3-1



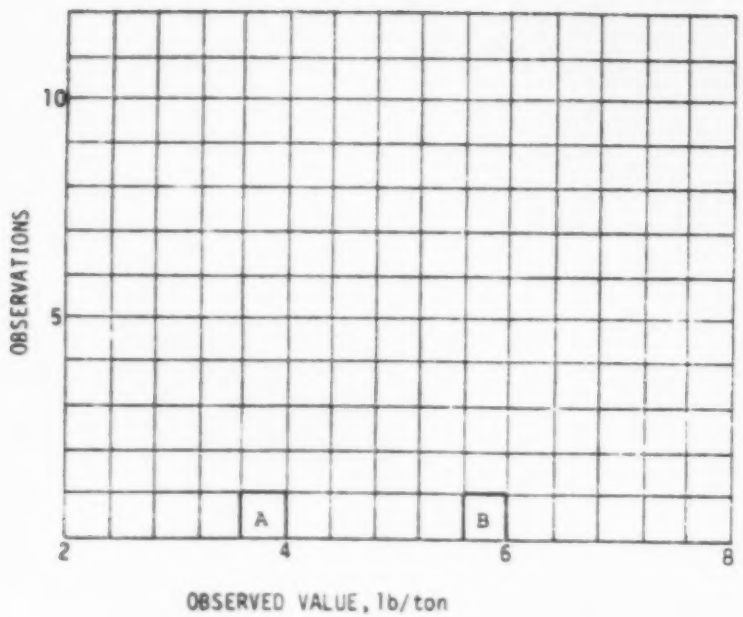

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 1 | none |
| A | 5[a] | .03 |
| B | 5[a] | .04 |

a) Reference 5 and fuel combustion emission factor included to obtain observed values.

Emission Factor 0.6 lb/ton

Pollutant Particulate from Oil-Fired Tunnel Kiln at Brick Mfg.

AP-42 Pg. No. 8.3-1



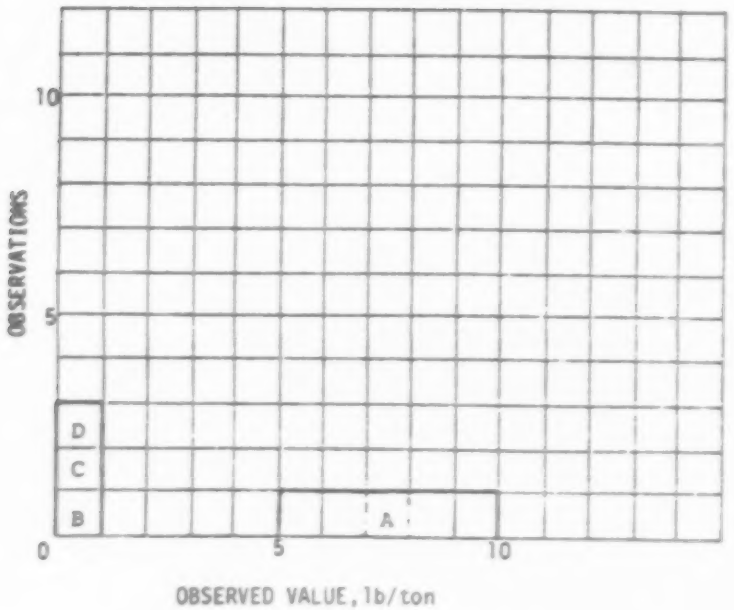

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 1 | none |
| A | 5[a] | .37 |
| B | 5[a] | .6 |

a) Reference 5 and emission factor from fuel combustion.

Emission Factor 1.0 A

Pollutant ~~Particulate from Coal-Fired~~ Tunnel Kiln at Brick Mfg.

AP-42 Pg. No. 8.3-1



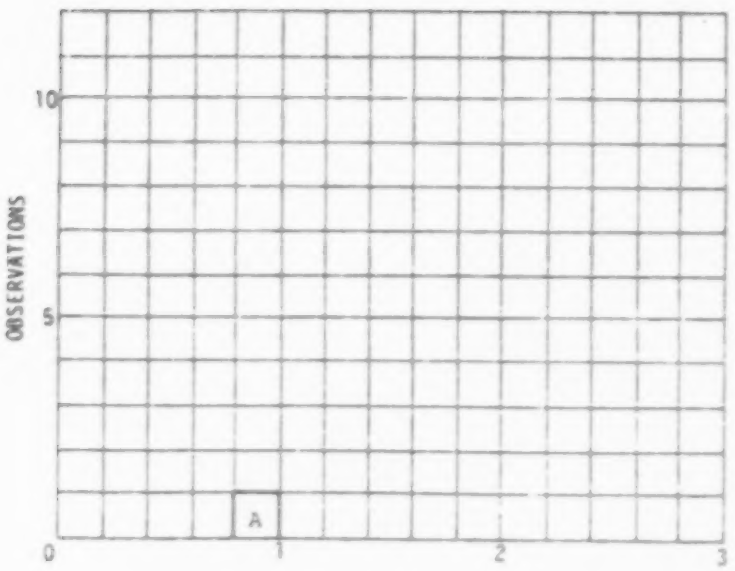

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 5A-10A avg= 7.5A |
| B | 5[a] | .22A |
| C | 5[a] | .28A |
| D | 5[a] | .38A |

a) Reference 5 and emission factor from fuel combustion

Emission Factor 0.11 lb/ton

Pollutant Brick Manufacturing-Particulate from Periodic Kilns (Gas-Fired)

AP-42 Pg. No. 8.3-1



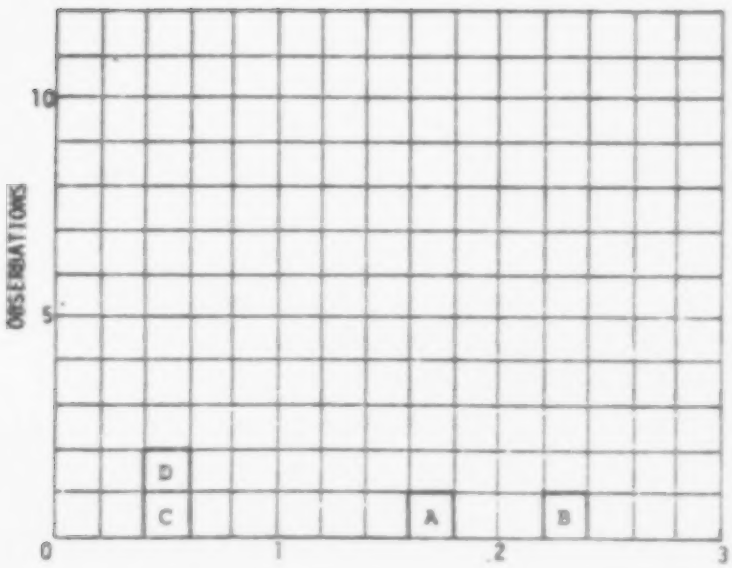

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 1 | none |
| A | 5[a] | 0.1 |

a) Reference 5 and emission factor for fuel combustion.

Emission Factor 0.9 lb/ton

Pollutant Brick Manufacturing-Particulate from Periodic Kilns (Oil-Fired)

AP-42 Pg. No. 8.3-3



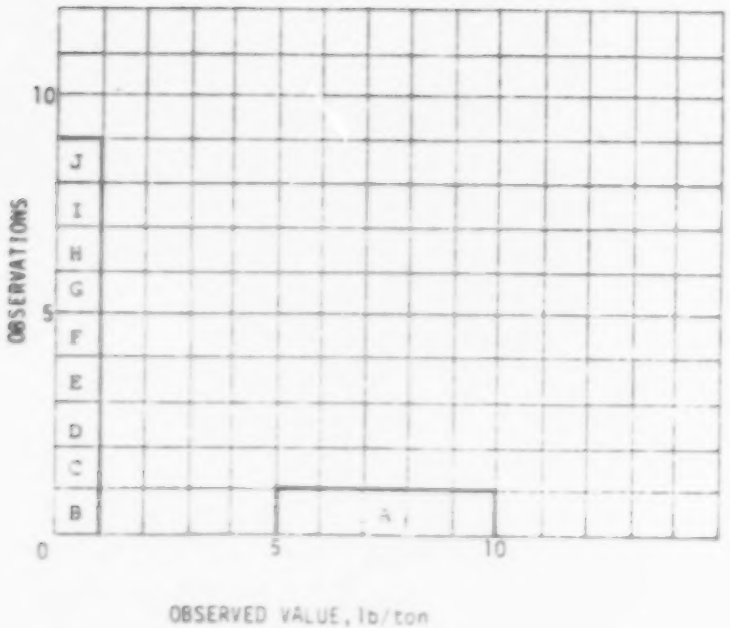

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 1 | none |
| A | 5[a] | 1.8 |
| B | 5[a] | 2.3 |
| C | 5[a] | .6 |
| D | 5[a] | .5 |

a) Reference 5 and emission factor for fuel combustion.

Emission Factor 1.6A lb/ton

Pollutant Brick Manufacturing Particulate from Periodic Kilns (Coal Fired)

AP-42 Pg. No. 8.3-3




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 5.0A - 10.0A |
| B | 5[a] | 0.67A |
| C | 5[a] | 0.45A |
| D | 5[a] | 0.37A |
| E | 5[a] | 0.46A |
| F | 5[a] | 0.92A |
| G | 5[a] | 0.65A |
| H | 5[a] | 0.77A |

Emission Factor 1.6A lb/ton (continued)

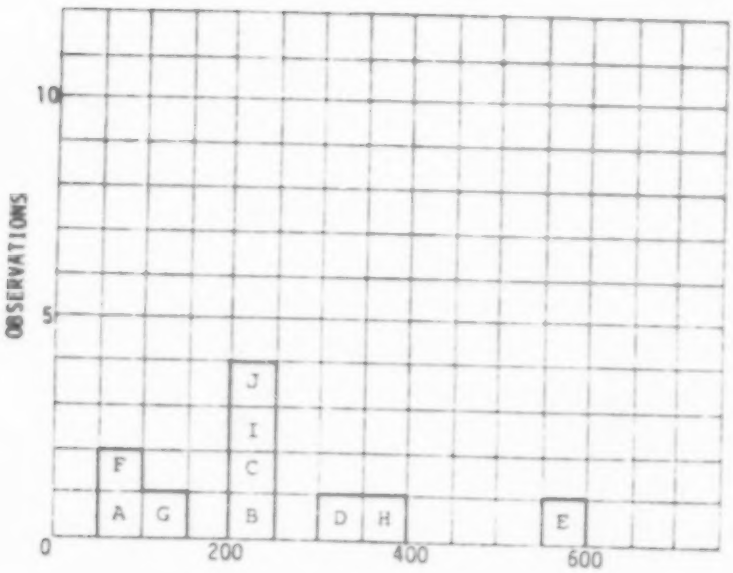
| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| I | 5[a] | 0.54A |
| J | 5[a] | 0.55A |

a) Reference 5 and fuel combustion emission factors.

Emission Factor 245 lbs/ton Cement Produced

Pollutant Particulate from Kilns in ~~Cement Plant (Dry-Process)~~

AP-42 Pg. No. 8.6-3




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 93.6 |
| B | 1 | 203.0 |
| C | 1 | 232.2 |
| D | 1 | 332.9 |
| E | 1 | 567.1 |
| F | 1 | 77.0 |
| G | 1 | 121.1 |
| H | 1 | 364.6 |

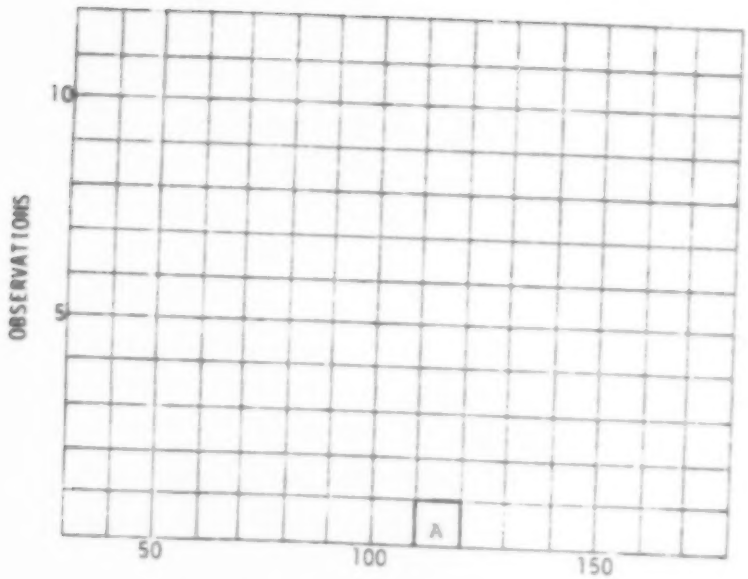
Emission Factor 245 lbs/ton cement produced (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| I | 1 | 211.4 |
| J | 2 | 239.4 |

Emission Factor 96 lb/ton Cement Produced

Pollutant Particulate from Dryers, Grinders, Etc. In Cement Plant (Dry Process)

AP-42 Pg. No. 8.6-1

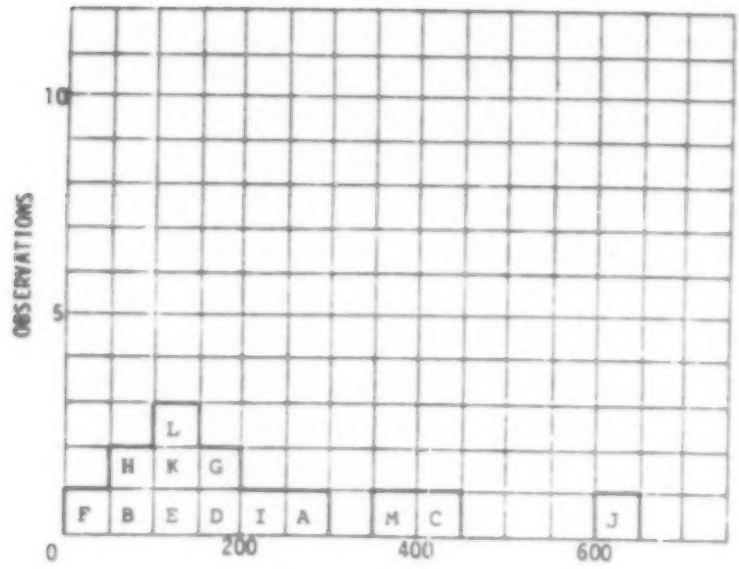



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 1 | none |
| A | 2 | 112.0 |

Emission Factor 228 lb/ton Cement Produced

Pollutant Particulate from Kilns of Cement Plant (Wet Process)

AP-42 Pg. No. 8.6-3




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 277.7 |
| B | 1 | 80.4 |
| C | 1 | 418.3 |
| D | 1 | 178.4 |
| E | 1 | 109.2 |
| F | 1 | 35.5 |
| G | 1 | 192.3 |
| H | 1 | 96.4 |

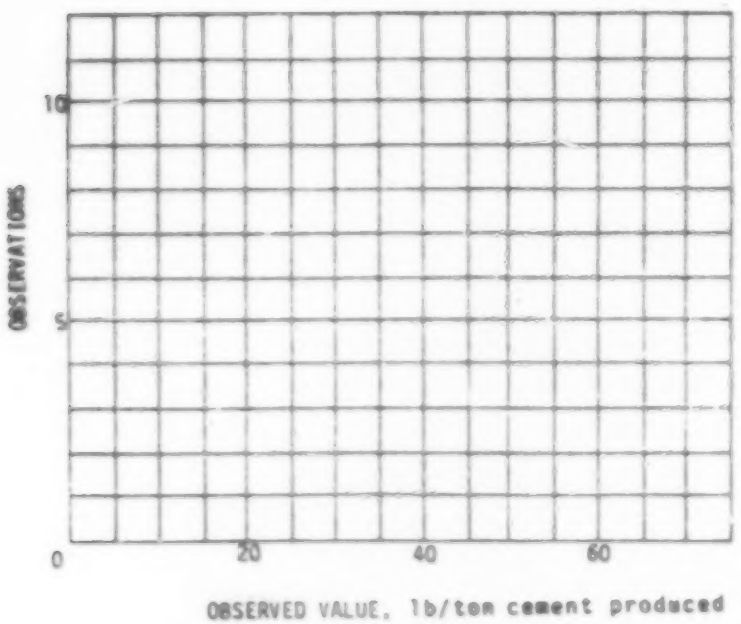
Emission Factor 228 lb/ton Cement Produced (continued)

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| I | 1 | 228.3 |
| J | 1 | 629.1 |
| K | 1 | 146.1 |
| L | 1 | 149.2 |
| M | 1 | 357.1 |
| | 2 | none |

Emission Factor 32 lb/ton

Pollutant Particulate from Dryers, Grinders, Etc. at Cement Plant (Wet Process)

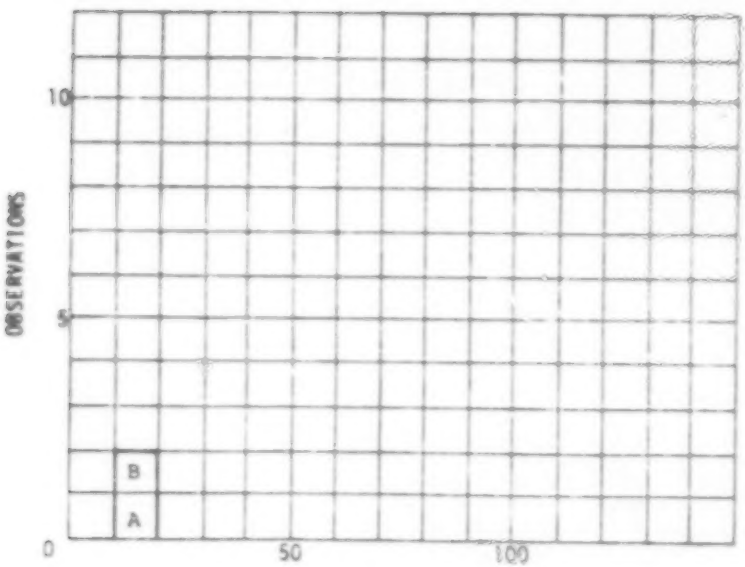
AP-42 Pg. No. 8.6-3




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 1 | none |
| | 2 | none |

Emission Factor 70 lb/ton
Pollutant Ceramic/Clay Mfg. - Particulate Emissions from Drying

AP-42 Pg. No. 8.7-1

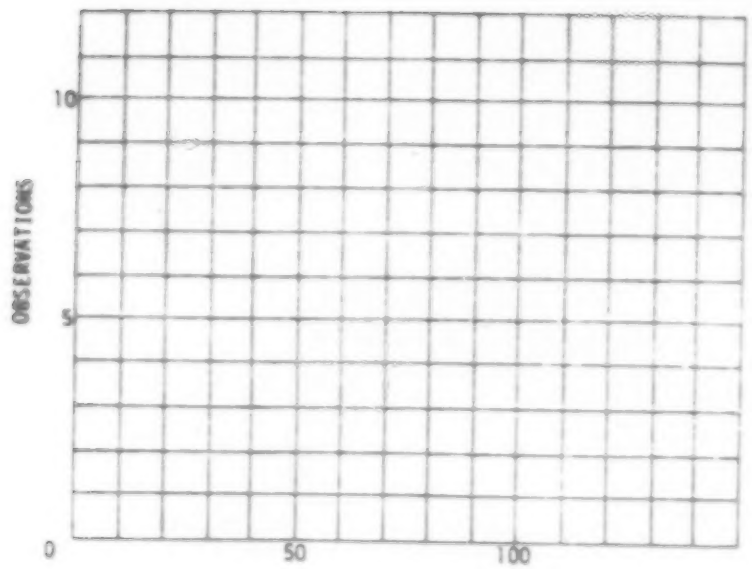



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | none |
| | 3 | ref. not available |
| | 4 | 16.8 |
| | 5 | 17.3 |

Emission Factor 76 lb/ton

Pollutant Ceramic/Clay Mfg. -Particulate Emissions from Grinding

AP-42 Pg. No. 8.7-1

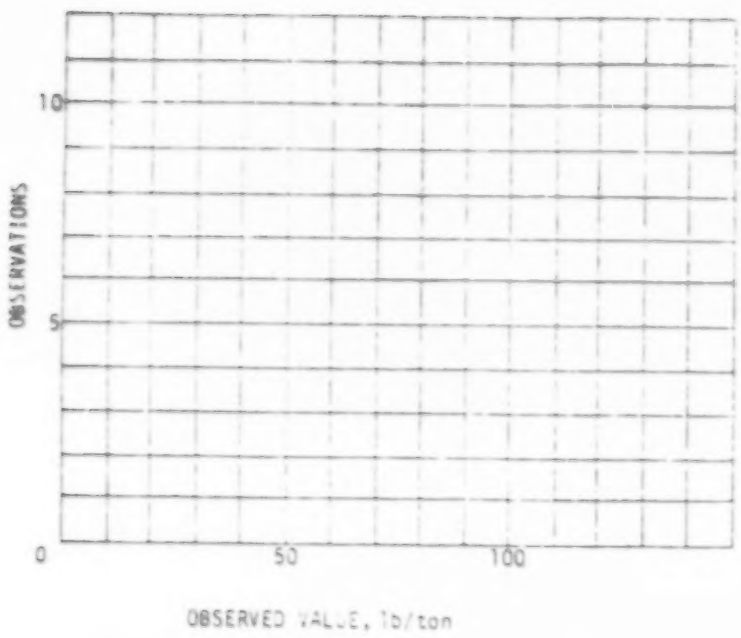



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | none |

Emission Factor 34 lb/ton

Pollutant Particulate from Storage for Ceramic Clay Mfg.

AP-42 Pg. No. 8.7-1

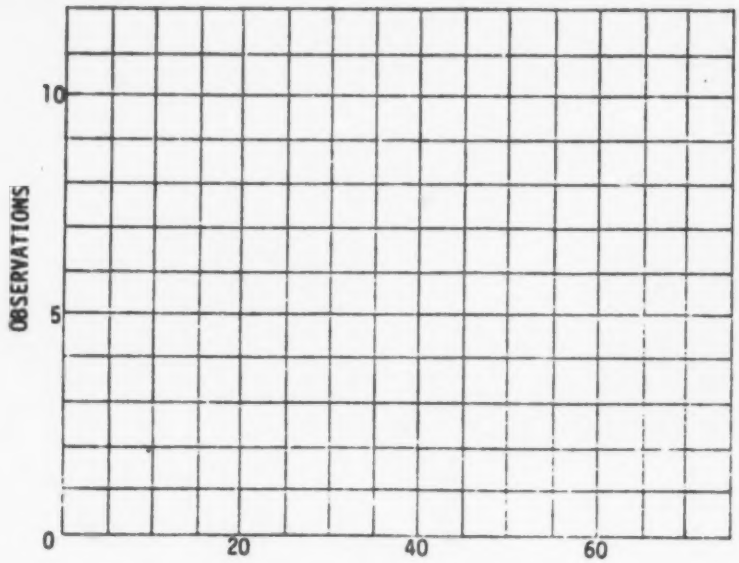



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 2 | none |
| | 3 | ref. not available |
| | 4 | none |
| | 5 | none |

Emission Factor 31 lb/ton

Pollutant Particulate from Primary Crushing at Lime Mfg.

AP-42 Pg. No. 8.15-1

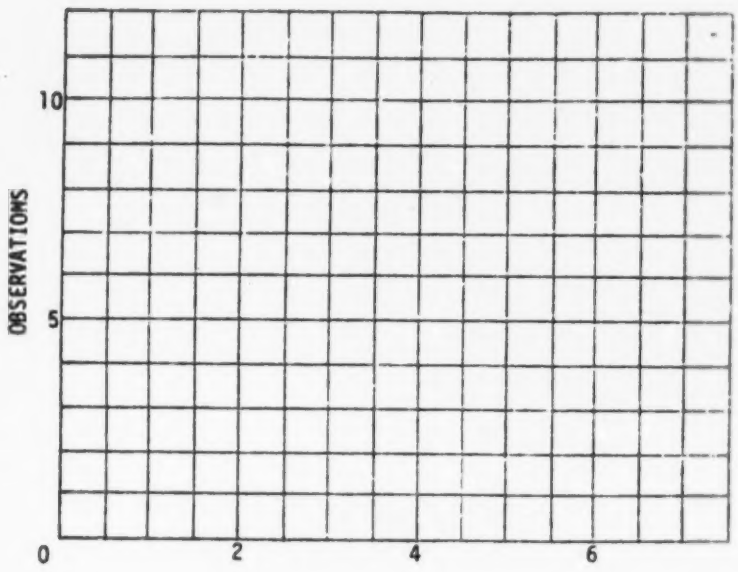



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 3 | ref. not available |

Emission Factor 2 lb/ton

Pollutant Particulate from Secondary Crushing at Lime Mfg.

AP-42 Pg. No. 8.15-1

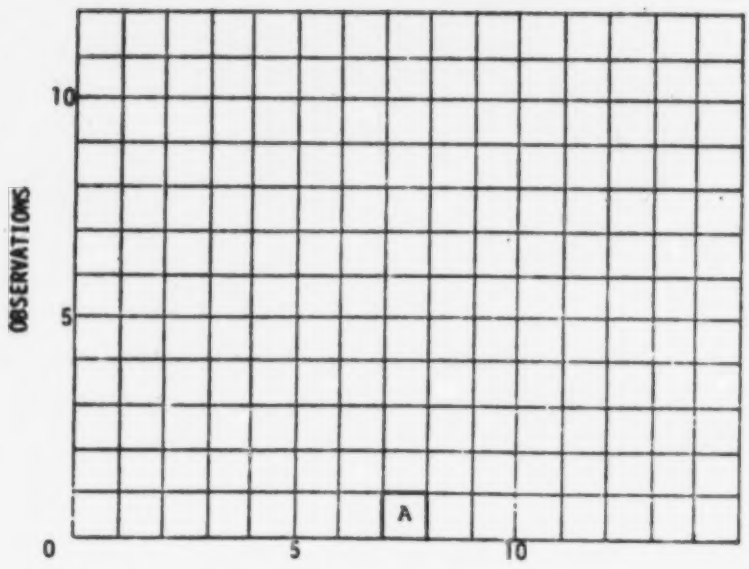



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 3 | ref. not available |

Emission Factor 8 lb/ton

Pollutant Particulate from Vertical Kiln at Lime Mfg.

AP-42 Pg. No. 8.15-1



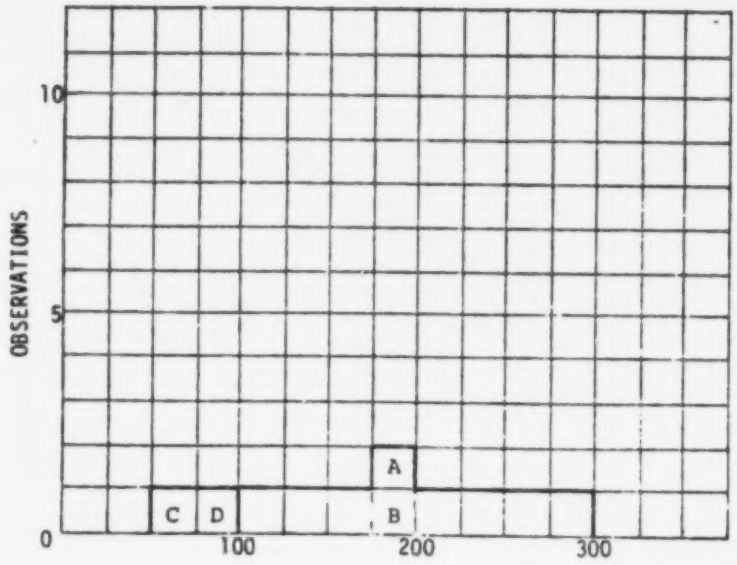

OBSERVED VALUE, lb/ton lime processed

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 2 | 7.4 |
| | 4 | ref. not available |
| | 5 | none |

Emission Factor 200 lb/ton

Pollutant Particulate from Rotary Kiln at Lime Mfg.

AP-42 Pg. No. 8.15-1

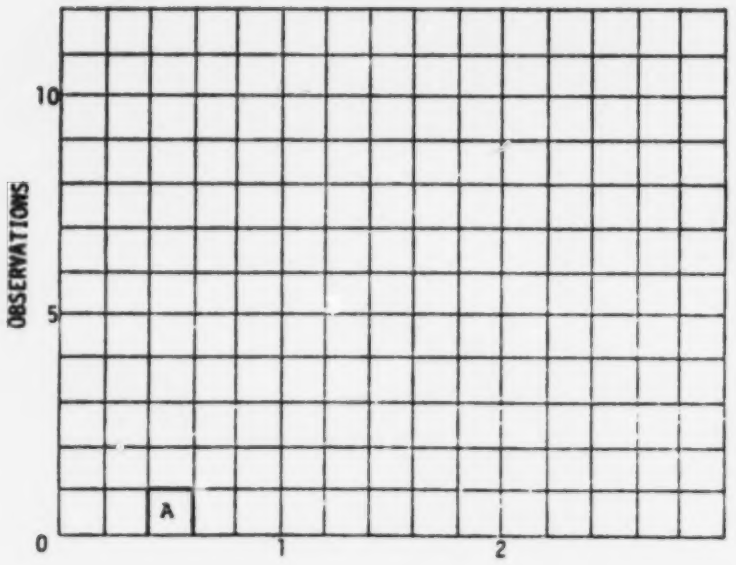



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 2 | 180.0 |
| B | 2 | 100.0 to 300.0 |
| | 4 | ref. not available |
| C | 5 | 55.5 |
| D | 5 | 99.0 |

Emission Factor 0.5 lb/ton

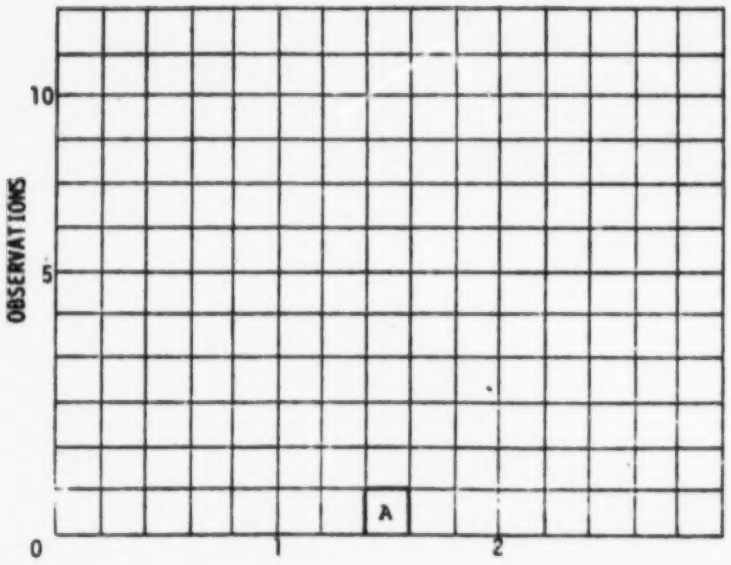
Pollutant Particulate from Primary Crushing at Stone Quarries

AP-42 Pg. No. 8.20-2




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 3 | 0.5 |

Emission Factor 1.5 lb/ton
Pollutant Particulate from Secondary Crushing at Stone Quarries
AP-42 Pg. No. 8-20-2

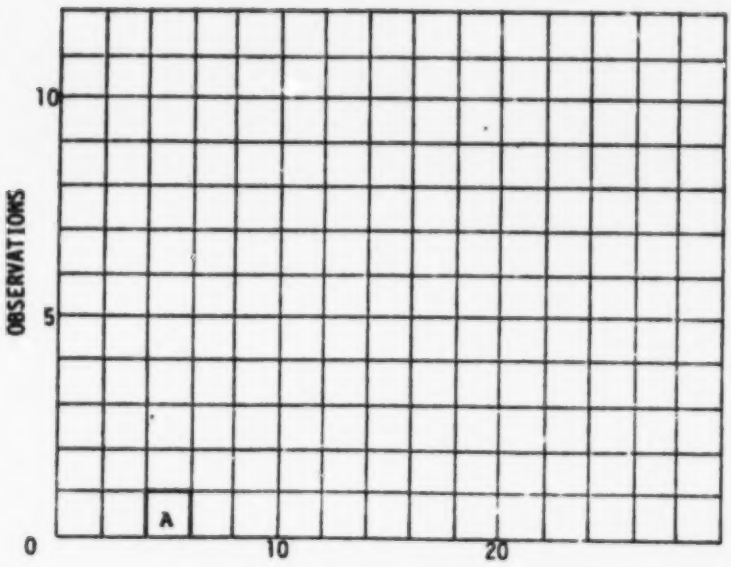



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 3 | 1.5 |

Emission Factor 6 lb/ton

Pollutant Particulate from Tertiary Crushing at Stone Quarries

AP-42 Pg. No. 8.20-2

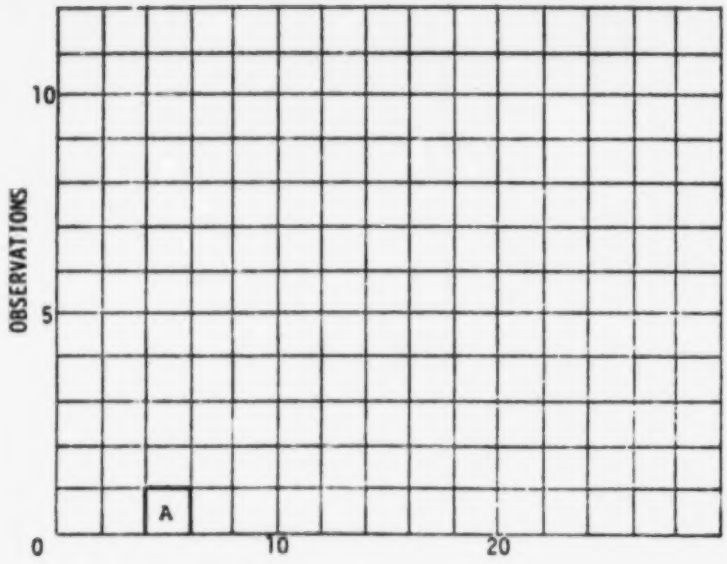



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 3 | 6.0 |

Emission Factor 5 lb/ton

Pollutant Particulate from Recrushing and Screening at Stone Quarries

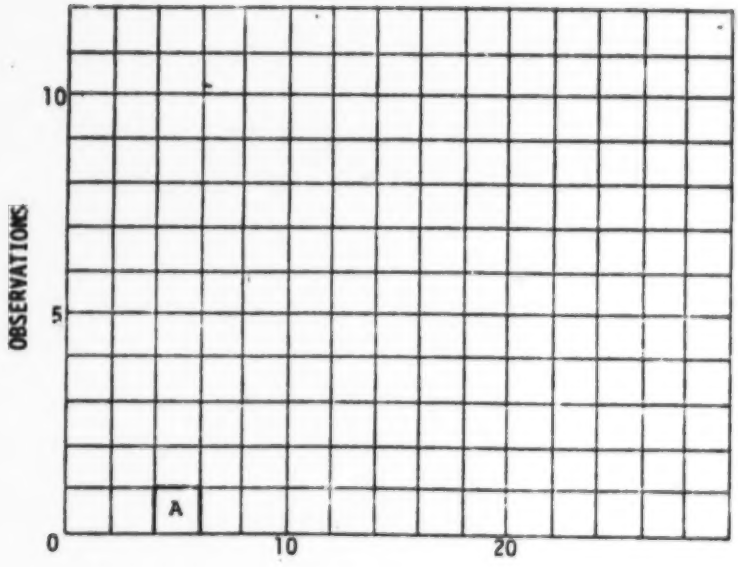
AP-42 Pg. No. 8.20-2




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 3 | 5.3 |

Emission Factor 6 lb/ton
Pollutant Particulate from Fines Mill at Stone Quarries

AP-42 Pg. No. 8.20-2

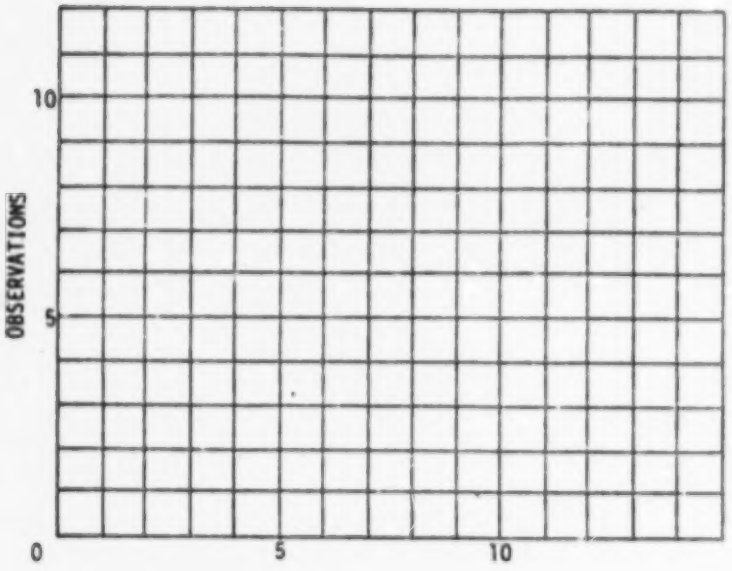



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 3 | 5.9 |

Emission Factor 2 lb/ton

Pollutant Particulate from Screening Conveying and Handling at Stone Quarries

AP-42 Pg. No. 8.20-2

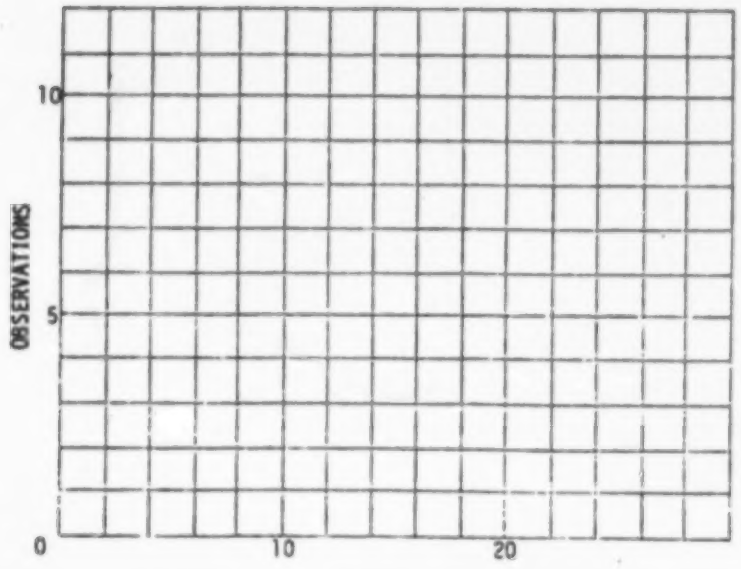



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 4 | none |

Emission Factor 10 lb/ton

Pollutant Particulate from Storage Pile Losses at Stone Quarries

AP-42 Pg. No. 8.20-2

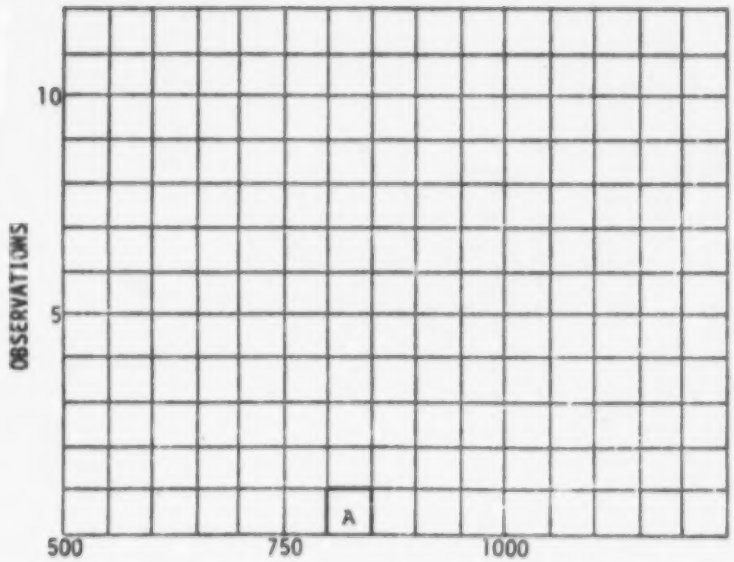



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| | 5 | none |

Emission Factor 840 $lb/10^3$ BBL Oil Burned

Pollutant Particulate from Process Heater-Petroleum Industry

AP-42 Pg. No. 9.1-3

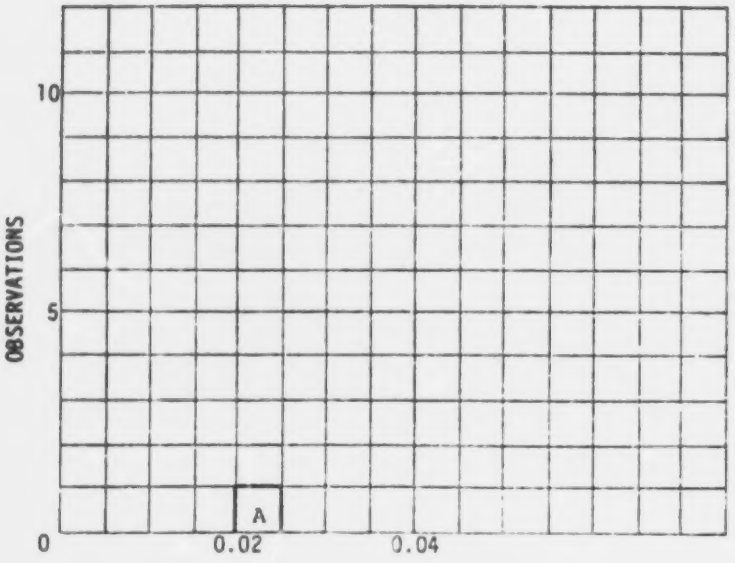



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 840.0 |

Emission Factor .02 lb/$10^3$ $Ft^3$ Gas Burned

Pollutant Particulate from Process Heater-Petroleum Industry

AP-42 Pg. No. 9.1-3



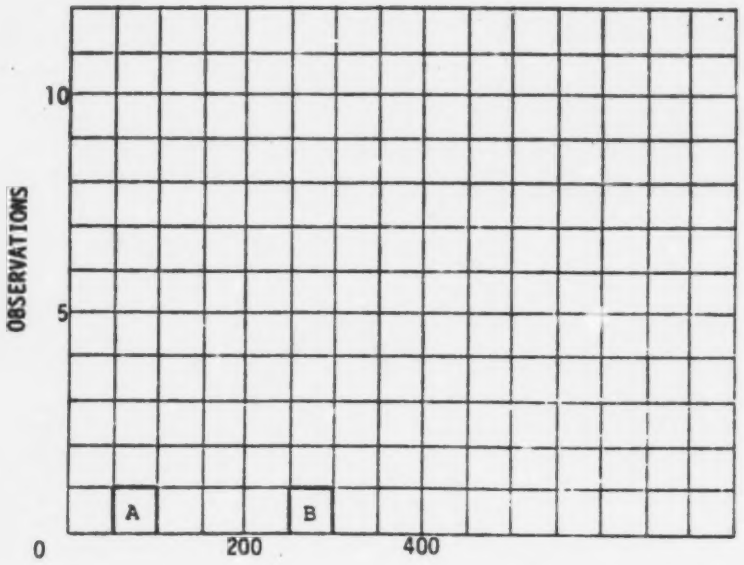

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 0.021 |

242 (93 to 340)

Emission Factor lb/$10^3$ BBL Fresh Feed

Pollutant Particulate from Fluid Catalytic Cracking Units Petroleum Ind.

AP-42 Pg. No. 9.1-8



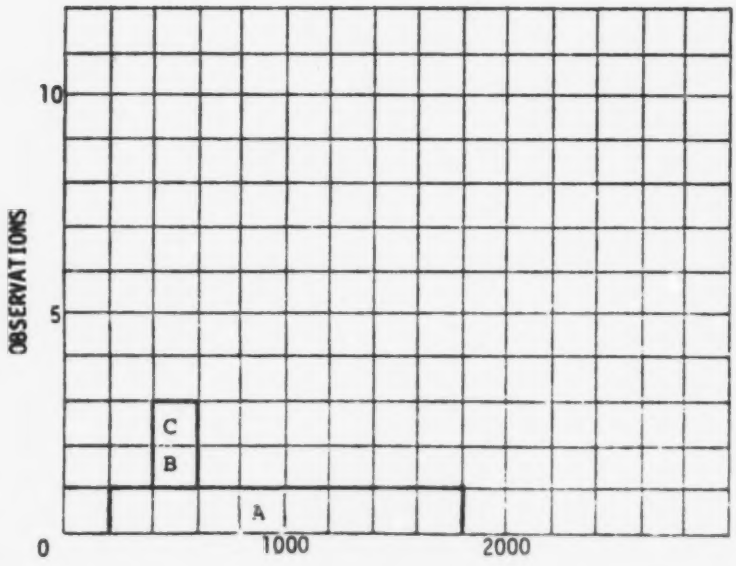

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 61.5 |
| | 2 | ref. not available |
| B | 3 | 270.9 |
| | 4 | ref. not available |
| | 5 | none |
| | 6 | none |

493(313 to 525)

Emission Factor lb/$10^3$ -BBL Fresh Feed

Pollutant $SO_x$ from Fluid Catalytic Cracking Units-Petroleum Units

AP-42 Pg. No. 9.1-8



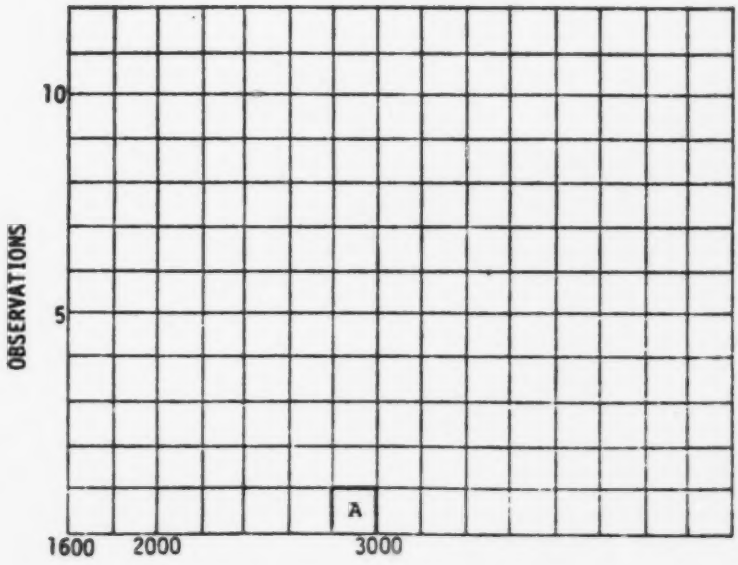

OBSERVED VALUE, lb/$10^3$ bbl fresh feed

| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 231.9 to 1649.2 |
| B | 1 | 525.6 |
| | 2 | ref. not available |
| | 3 | none |
| | 4 | ref. not available |
| C | 5 | 533.4 |
| | 6 | ref. not available |

Emission Factor 2900 $lb/10^3$ BBL Oil Burned

Pollutant $NO_x$ from Process Heater-Petroleum Industry

AP-42 Pg. No. 9.1-8

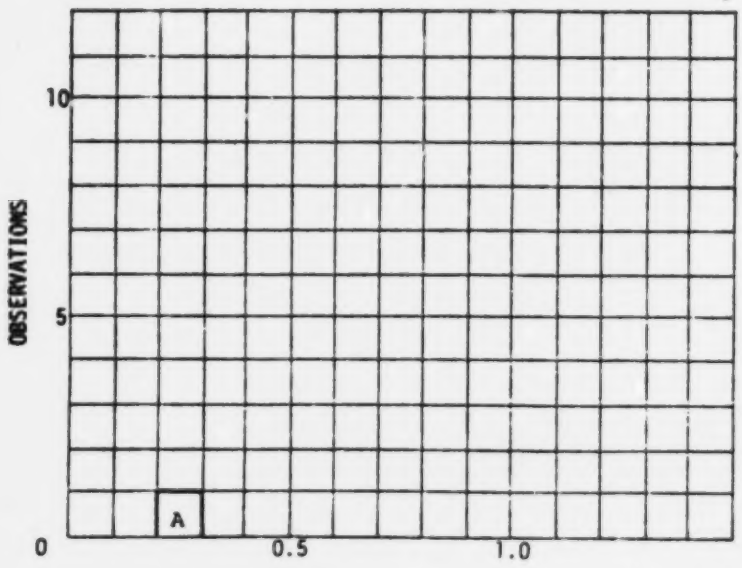



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 2856.0 |

Emission Factor 0.23 lb/$10^3$ $Ft^3$ Gas Burned

Pollutant $NO_x$ from Process Heater-Petroleum Industry

AP-42 Pg. No. 9.1-8

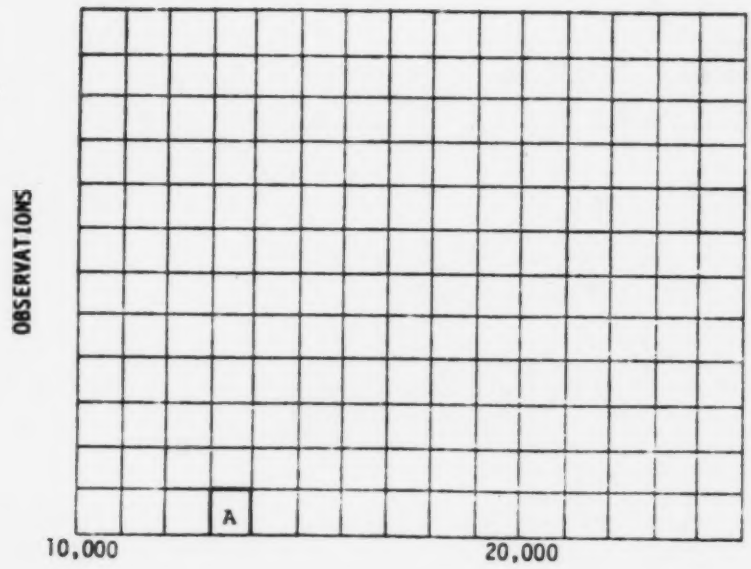



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 0.23 |

Emission Factor 13,700 lb/$10^3$ BBL Fresh Feed

Pollutant CO from Fluid Catalytic Cracking Units-Petroleum Ind.

AP-42 Pg. No. 9.1-8

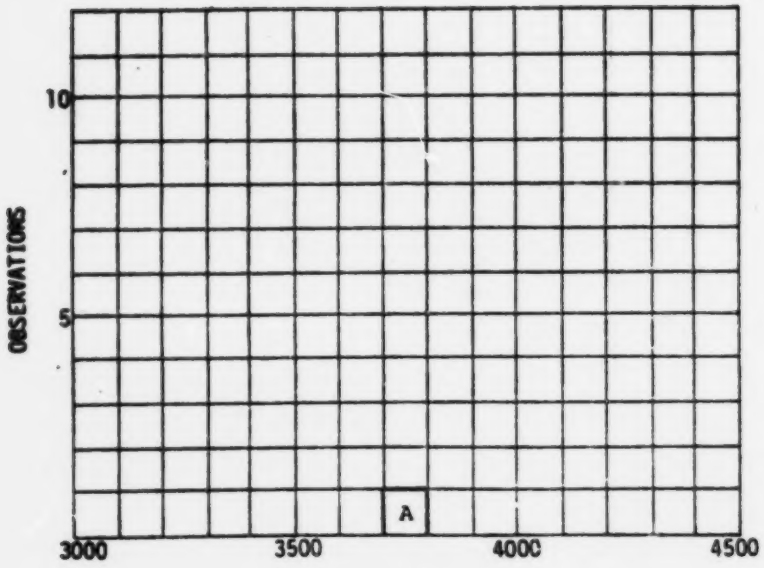



| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 13700.0 |
| | 2 | ref. not available |
| | 3 | none |
| | 4 | ref. not available |
| | 5 | none |
| | 6 | none |

Emission Factor 3,800 lb/$10^3$ BBL Fresh Feed

Pollutant CO from Moving Bed Catalytic Cracking Units-Petroleum Ind

AP-42 Pg. No. 9.1-8




| Observation | AP-42 Ref. No. | Observed Value |
|---|---|---|
| A | 1 | 3770.0 |